

# Stock Prices

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# STOCK PRICES

FACTORS IN THEIR RISE AND FALL

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ILLUSTRATED WITH CHARTS

BY

FREDERIC DREW BOND



VOLUME VI OF "THE INVESTOR'S LIBRARY"

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## I.

### **The Distribution of Securities**

THE stock of a corporation is its ownership; its bonds are the evidence of its funded debt. Usually, for business purposes, the stock of a company is represented by certificates, each of one or more of the shares into which the stock as a whole is divided. All the shares of a company's stock thus represent the whole ownership, and each share represents such part of the ownership as it is part of the whole number of shares.

Shares of stock sell without entailing liability on the purchaser beyond such as is involved in a possible decline in price. The advantages in the power to transfer any part of the ownership of a concern without necessarily interfering with the conduct of the business and without the purchaser assuming risk beyond an impairment of the worth of his purchase money, are the chief causes of the strong disposition, in the last two decades, to prefer the corporate form of business to the older partnership form.

Formerly, a business man owned one concern or a certain share of it as a partner; occasionally, he might have interests in another property, but even this was rather rare. At the present time, the ability to buy and sell the stock of a corporation in small parcels has distributed the ownership of these companies among very many holders.

There is now probably not a steam road of importance whose stockholders do not number well into the hundreds, while in the case of the great railways the owners are to be counted by the thousands till they reach their maximum in the number of the Pennsylvania Railroad stockholders, over 55,000 in December, 1909. Not only is one concern owned by many persons, but, conversely, many persons may each own a small parcel of very many concerns. In this way a community of business interests arises, which reaches its apex in the case of great capitalists with interlocked holdings in very many huge corporations.

Shares are often of two sorts: preferred and common. Shares of preferred stock have usually a limited claim on the yearly earnings of a corporation prior to the claims of the common stock. In the event of the company's liquidation, preferred stock has, also, very often, preference as to the assets. Common stockholders, as a rule, get whatever earnings may be distributed as dividends after the preferred shareholders have received their limited but prior distribution. When there is but one class of stock it has, of course, all the rights of ownership.

Since the days of early railroading, it has been the custom in America to let the nominal, or par, value of bonds and preferred stock represent roughly the valuation of a corporation, or, sometimes, the actual capital invested at its start. In this way, the common stock means merely the business possibilities of the concern at its inception. When a company is successful, the common stockholders receive ultimately the lion's share of the

profits, but if the concern fails such stock is not infrequently totally valueless. This method of capitalizing has been objected to on the ground that the nominal, or par, valuation (usually \$100) of a share gives the impression of a real value, which does not exist, and that the pressure which the desire to earn dividends on a mass of overrated shares exercises on managers leads to detrimental business practices. Stock, whether common or not, which, in this manner, has, at the outset of a concern, little or no actual equity in the assets and earnings has been termed "watered stock." But the price paid for such shares by any buyer represents his estimate of the business possibilities they connote, and is not based on the nominal value of the share or on the number of shares issued. Of course, the nominal capitalization should not exceed the value of the actual condition into which, in the end, it is believed these possibilities will issue. The shares of Adams Express Company and of some other concerns have no nominal valuation, but represent, each, a certain percentage of the whole stock; such shares sell at about \$100 apiece whenever the number of dollars received on each, yearly, as a dividend, is regarded as a fair percentage return on its class of business.

In commerce the things dealt with are concrete. Commodities have value in exchange because of their value in use to the last purchaser, or consumer; they are produced to satisfy a want and used up in its satisfaction. But the use of stock, on which its value in exchange depends, is simply to increase or conserve wealth by affording an in-

come to a holder or through a change in price. Strictly speaking, stock, or ownership, can be neither produced, in an economic sense, nor consumed; it is a business relation which appears and disappears in accordance with other business facts and relations.

Holders of stocks are investors and speculators. A desire to avoid the latter term has led to a tendency to make the word "investor" cover more than it rightly should. An investor is one who buys a bond for its income or stock for its dividends. A speculator buys or sells in hope of a change in price which will redound to his advantage. The difference between investor and speculator is thus one of intention, not of outward fact. An investor may change his mind about shares purchased for dividends and sell them at a speculative gain. Conversely, a speculator buying in hope of a rise in price may determine to hold the stock bought, permanently for the sake of its dividends. The only usual outward difference between the two sorts of purchasers is that an investor, as a rule, holds his stock very much longer than a speculator does his, and that operations for a fall in prices are always speculative. The element of difference in length of holding as well as the different motives actuating the two sorts of buyers renders the distinction one which clarifies discussion. Between speculation and gambling, the common element of uncertainty and the frequent similarity of the motives of the participants have caused some confusion. Gambling, however, "consists in placing money on artificially-created risks of some fortuitous event, speculation consists in assuming the inevi-

table economic risks of changes in value." Gambling is always betting: speculation, no matter what the intention of the trader may be, always vests in him the rights and duties of a property owner.

A corporation may offer its stock for sale in part or in whole; or, the shares may be sold privately or on the exchanges. Stock sold in the first instance directly by a corporation is afterwards subject to sale, usually through private transaction or on the exchanges only. The stock exchanges of the different cities—which are organizations, sometimes incorporated, sometimes, like the New York Stock Exchange, having the status of a private club—are limited to a certain number of members who assemble together at certain hours each day and execute with one another orders of customers to buy and sell stocks and bonds. The stocks traded in on each exchange are limited to those formally admitted to such privilege. Nearly every large city in America has a stock exchange of more or less local prominence, but those of Boston and New York only stand in the first rank. Boston is the centre of trading in the mining stocks of the country, particularly those of copper; New York in the railroads and industrials. As the two latter classes of business are much the more extensive of the three sorts, the New York Stock Exchange is, by far, the most important in the country.

On the New York Stock Exchange the number of brokers is limited to 1,100. Many members are connected with firms in which there are other partners, not members of the Exchange. Besides the New York City

offices, there are branch offices of Exchange firms in all of the important Eastern cities and in not a few of the Western. Probably several hundred members of the Exchange, known as "room traders," are engaged in the business of speculation for themselves alone. The majority of these room traders are "scalpers"; that is, they buy and sell stocks for their own account and then close the transaction the same day whether it shows a loss or a gain. In this way, they rarely have commitments open overnight. It may be added that some of the stocks traded in on the New York Stock Exchange are bought and sold on other exchanges, also.

On the New York Stock Exchange, the dealings are ordinarily in 100 share lots or simple multiples of such amount. Many brokers refuse to buy a smaller number of shares unless they are to be paid for in full at once and taken off the market. Stock bought for speculation is usually purchased with the aid of the broker's resources, the customer depositing a sum, called his "margin," equal to so many "points" (or dollars a share) on the purchase price of the stock; the certificates purchased are retained as a pledge by the broker and are generally repledged by him at his bank. When the price of stocks bought on margin declines below the number of points covered by the margin, the shares pledged with the broker are either sold by him to ensure himself against loss or, further margin is obtained from the customer.

It is customary on the exchanges to trade not only for a rise in stock prices, but for a fall. A trader who believes that a stock is selling too high and who thinks the

price will decline, may "sell short" shares of that security. In doing this through a broker, the latter contracts to deliver the shares in question to a purchaser before a fixed time, generally the usual time for stock deliveries, or a quarter past two the afternoon of the next full business day. He then borrows the stock of some owner, putting up against it, as security, the full amount, in cash, of its selling price. The stock so borrowed is then delivered at the appointed time to its purchaser. This completes the first part of a short sale. When it is wished to close the operation, the broker buys in the same amount of shares as he had previously sold short and delivers them to the person of whom he had borrowed them, receiving back his security money, usually with interest. The price between which the broker sold the borrowed shares short, and the price at which he bought them back to return them to the lender shows whether a gain or a loss has been made by the transaction. If the shares have fallen in price, the short seller makes the difference between the higher price at which he sold them short and the lower price at which he bought them back for their lender; if the price rises, he loses the difference between the lower price at which he sold them short and the higher price at which he was obliged to re-purchase them. When a customer engages in this transaction the usual margin is still required by the broker, because, if the shares go up in price, the lender may demand them back, and the broker be forced to buy them in at the higher price, at a loss to himself unless protected by margin of his customer.

The advance of funds by the broker against the pledge of shares is simply the extension to speculative operations of the principle of credit. It enables the purchaser to take larger risks and obtain, if successful, greater gains than his own capital would allow him to do; in doing this, it offers, also, speculative chances to many who, otherwise, would be unable to enter into commitments of sufficient size to warrant the making. In a marginal market the commitments are, therefore, much more extensive than in a market void of this sort of speculation. How much larger is difficult to estimate exactly. As \$100, or par, is probably about a fair average price of the shares sold on the Exchange from year to year, and as one-tenth of this sum, or \$10 a share, is the usual margin required, it might be hazarded that the trading in a market such as the New York Stock Exchange, were there no marginal dealings, would be but one-tenth in amount of what it now is. But, probably, it would be much less, as many traders would not deal speculatively at all if their possible profits were divided by ten, and they, themselves, forced to pay in full on all their commitments. In any event, the transactions in a market where marginal trading obtains are very much more frequent than in a market of similar size for the same stocks but devoid of this species of trading.

Stocks which for years pay good dividends go more and more into permanent investment hands. Pennsylvania Railroad stock, which has never failed to receive a dividend of some size since the beginning of the company, has its 317 millions of dollars of shares owned by

over 55,000 registered holders; while Union Pacific common, though paying 10 per cent dividends against Pennsylvania's 6 per cent, has its 214 millions of dollars of shares held by but 10,000 registered holders. (December, 1909). Generally speaking, the better thought-of a stock, the greater the number of its registered holders and the less the amount of the average holding of each. The Journal of Commerce of New York City has for some years past compiled annually a list of the registered holders of the great corporations, its information being furnished directly by such concerns as are willing to afford publicity to their figures. From these statistics it appears that the average number of shares, at the close of 1909, of Pennsylvania stockholders is about 60; of Lackawanna, 180; of Delaware and Hudson, 70; of New York Central, 110. On the other hand, a speculative stock like Union Pacific has average holdings of about 200 shares; Southern Pacific, 240; Southern Railway, 300, and Reading, nearly 700 (par \$50 in this case). As the stocks, with the large average holdings, are the speculative leaders, and as those with the smaller average holdings are the ones thought best of by investors, it is evident that the better a stock is thought-of by investors the smaller become its average holdings as the number of share owners increases.

When shares are bought by investors and taken off the market, almost invariably they are registered on the transfer books of the company in the investor's name and a new certificate is issued to him. He wants the certificate in his own name, both as a token of ownership and so

that the dividends paid will come to him directly instead of going first to some previous owner, in whose name the shares stood before purchased by the investor in question. But, when stock is bought for speculation, "on margin," a transfer on the company's books is infrequent. Let us suppose that shares have been sold by Jones in whose name they are registered. Smith, the customer of a brokerage firm, buys in these shares for speculative purposes through his broker. Jones' signature on the back of the certificate has been witnessed by *his* broker and the shares thereby made a "good delivery." In this condition they are received by Smith's broker. But Smith has no intention of keeping these shares. Soon he sells them. The speculator buying them of him, also, holds them but a short time before he sells. In this way the shares are handed successively from one broker to another, each of whom executes speculative orders in connection with them for his own customer. All the time, the certificates are in the physical possession, not of anyone of the speculators, but of either a broker or a bank at which the broker pledges them as security for loans. If the shares are "cleared"—that is, if the purchases and sales are offset against each other through a "clearing house," the actual certificates may pass into the hands of a brokerage house which has nothing at all to do with their particular purchase or sale but which received them in settlement, in part or in whole, of its own dealings in the shares of that stock. But, in any event, whether the shares are "cleared" or not, they may during all this period stand in the name of Jones, their first, registered owner. But,

it is more probable that they will soon be transferred, for convenience, into the name of some broker, and in this shape undergo their successive passages from hand to hand. In this way, the great bulk of the stock floating around Wall Street stands in the name of a member of the New York Stock Exchange. Unless the stock is bought by an investor, a transfer, afterwards, on corporation books will be made simply for the sake of getting the dividends directly from the corporation instead of having the trouble of applying to the broker in whose name the shares stand.

It thus appears that while all investment stock, the country over, is transferred almost invariably on the corporation books, speculative stock is thus registered very infrequently and usually only for convenience in obtaining dividends. Thus, the number of shares transferred during the year on the books of a company will necessarily be greater than the number of investment trades, because a certain indefinite number of shares carried speculatively on margin will also be transferred. Now, if the great corporations published the number of shares registered by them year by year, it would be easy in any instance to state at least the maximum relation between the amount of investment and the amount of the total dealings, by simply comparing the amount of stock registered with all the stock sold during the year. The figure arrived at would be too high because some of the registered stock, as already said, is for speculation; but it would be still near the exact facts. By comparing the Journal of Commerce figures from year to year with the

average stockholdings in that sort of business, the country over, and with the quantity of shares sold on the New York Stock Exchange, a close approximation in the matter can still be arrived at.

For example, during 1909 the registered stockholders of Reading common decreased 750 in number. That same year, general railroad stockholdings all over the country averaged about 150 shares per holder. Reading shares being "half shares" (par, \$50 instead of \$100), it is easy to see that probably a quarter of a million shares ( $750 \times 150 \times 2$ ) of the stock sold all over the country, were that year transferred on the company's books.

But, during 1909, no less than 28 million shares of Reading common were sold on the New York Stock Exchange alone. In other words, the investment dealings in this stock all over America must have been less than 1 per cent (250,000 divided by 28,000,000) of the total transactions in the stocks on the New York Stock Exchange.

In this calculation the number 150 as the total average amount of stockholdings in all the important roads is obtained by dividing the capitalization of all these roads by the number of registered stockholders they report. Reading's own average is several times greater (350 shares), but as a large amount of the stock is held for purposes of control it seems fairer to take the average holdings in all roads. To the calculation itself, the only objection that can be made is that the figure representing the decrease, 750, is necessarily a net figure and that it may simply represent the remainder of a large number

of increases and decreases. But this is not quite so; during that year the stockholdings in nearly all the roads decreased, and moreover, such inaccuracy as necessarily exists in the matter is probably more than offset by the fact that this figure includes decreases arising from registrations of speculative stock. A broker, for instance, coming into possession of ten "odd lots" of shares aggregating 100 shares, will have them transferred into a single 100-share certificate, this amount being the unit of trading on the exchange.

To test the correctness of this mode of estimating, let us apply the same method to Pennsylvania, Atchison and Union Pacific. Pennsylvania stockholdings in 1909 decreased about 3,500. The same year the sales on the New York Stock Exchange were nearly 6 millions. Performing the calculation as before, we get  $(150 \times 3,500 \times 2 \text{ divided by } 6,000,000) 17\frac{1}{2}$  per cent as result. It is worth notice that, whereas, if instead of the figure of 150, the Reading's own average stockholdings were used our result in that case would be several times larger—in the case of the Pennsylvania, that road's own average holdings, about 60 shares, would greatly reduce the proportion shown of investment to speculative dealings. Reading, it may be added, is the most speculative great railroad stock on the exchange and Pennsylvania the most favored by investors, so these two extremes of 1 per cent and  $17\frac{1}{2}$  per cent correspond with the trend of facts. Proceeding similarly with Union Pacific and Atchison, we obtain in the former case  $(4,000 \times 150 \text{ divided by } 21,000,000)$  nearly 3 per cent, and in the latter

case ( $700 \times 150$  divided by 5,500,000) about 2 per cent—as representing the percentage of investment dealings everywhere to speculative dealings on the New York Stock Exchange. It should be observed that the par of both these stocks is \$100, so that the number of shares in these two last calculations does not need to be multiplied by two, as in the case of Reading and Pennsylvania. Also, that, in all the calculations, an investment deal is assumed to be one in which at least one of the parties is an investor. No attempt has been made to distinguish the case where investor sells to investor, separately.

These percentages are estimates. In some instances they may be too high, in others too low. But taking them all in all, noticing how generally consistently they work out, it is a fair conclusion that on the New York Stock Exchange, the total of investment dealings, at least in the great railway securities, is considerably below 5 per cent of the total transactions.

It might be expected that the multitude of transactions on the New York Stock Exchange would ensure sales at every allowable figure between the upper and lower prices of the day. An inspection of the daily sales list (published, for instance, in the *New York Evening Sun*) shows this to be so. Stocks frequently traded in are sold at every eighth of a dollar fluctuation between the highest and lowest prices of the day, and would be sold at even closer differences did the Exchange permit sales at prices involving sums of less than an even eighth of a dollar a share. A stock like Union Pacific will move by eighths of a dollar a share on every trading day, unless

in the event of a sudden panic or of some other unusual and potent market influence; while shares of a much less active stock, such as Wabash, may be sold a few times during the day's session at differences between each sale of a quarter of a dollar a share, a half or more. Lastly, the inactive stocks—often largely confined to investment dealings—are often without any sales on many days and frequently vary from transaction to transaction by several dollars a share. The greater the amount of speculative trading, the greater the activity in a stock; and the greater the activity, the more continuous its price range; the less active, the more disjointed this range. Marginal trading thus affords not only an instant market for stocks, but a market of minimum difference between successive sales.

Without stock speculation, investment dealings in stocks would take on the same character as purchases and sales of a partnership in a firm. The relatively very small amount of investment buying at one time compared with the amount of speculative, shows how few shares would be bought at the outset of a company if they had to be taken on the basis of the dividend returns now customary. It is the speculator who, in consideration of the chance of profit, is willing to take the burden and the risk at the inception of an enterprise. To dispose of the stock of a new railroad or industrial company to the "public" without the intermediation of speculators, returns analogous to those offered by partnerships would have to be paid as dividends to attract sufficient buyers to the spot. Only in the course of years does a stock

pass slowly into permanent investment hands, after it has long paid good dividends and has become valued not only for these dividends themselves, but for the certainty of their return. Indeed, shares disposed of to investors by new corporations not listed on the Exchanges, are readily sold only when large dividends are paid at the very start, or when emphatic statements (whether true or false) that such will be paid are made and believed. But large dividends in the case of great corporations would mean much smaller capitalizations, and, in particular, the extinguishment of the peculiar speculative position so often held in American finance by common shares.

## II

### **Factors of Share Prices**

A speculator wishes to make as much money as he can; an investor, to get as large an income as possible. The dealings of each in the stock market are a reflection of their wishes. But both wish, also, to avoid loss; hence another motive impelling them to action. On the beliefs of speculators and investors, therefore, and on their consequent hopes and fears depend the prices paid for stocks and the stocks bought and sold. As this is true of everyone in the market, it follows that prices are but the resultant of the interaction of the hopes and fears of all traders. As the late Walter Bagehot put it, in the stock market, and there only, does the "economic man" of political economy, actuated solely by the desire for gain, cease to be a convenient fiction and become a reality.

To say that nothing affects stock prices save through the minds of buyers and sellers might seem a mere platitude, but, as a matter of fact, it is common to hear a rise in the rate of interest, the defeat of a nation in war, an earthquake or some other notable event ascribed as a cause of stock movements; the seeming implication being, often, that in some vague way these facts do, of themselves, make the prices. In a sense, indeed, such statements, as well as the metaphor which

speaks of the stock market as the "barometer of business," are convenient shorthand expressions, but, in another sense, they are not infrequently the token of a confusion of thought. A puzzling feature of the market to many is its occasional opposite response at different times to the same sort of business happenings; thus, in December, 1905, the steadiness of quotations in the face of call money rates of extreme stiffness was a source of excessive perplexity to those aware of the singularity of the fact but who failed to note that it is not an event itself but its influence in affecting the acts of the market participants which determines the course of prices. The knowledge of an occurrence and the feelings which it singly awakens, mingle with a host of other ideas and feelings in each trader and modify the resultant of their interactions.

It is this mental factor which judges that railroad shares are better investments than industrial, though, in certain respects, the justness of this inference may be open to challenge. Dividend paying stocks sell ordinarily at about prices which net the purchaser not so far from the current interest rates for money expected on the security they offer. Stocks guaranteed by high-grade companies and those which have come to be held entirely by investors, or almost so, pay a return on the purchase price little, if at all, higher than that derived from a first-class bond or mortgage or from the highest sort of commercial discounts. Railway stocks paying dividends of from 4 to 7 per cent are expected in good times to net the investor

from about  $4\frac{1}{2}$  to 6 per cent, while from 6 to 8 per cent return is generally looked for from industrial shares paying dividends of from 5 to 10 per cent. The ease of investment and the absence of personal liability make dividend paying shares on the great exchanges a receptacle for the spare funds of the community in exactly the same way as real estate, mortgages, bonds and deposit accounts.

For these reasons, no matter how "watered" the stock of a company may be at its outset, if it comes to pay dividends at about the rate expected in its class of corporate business, and if its earnings seem likely to enable it to continue such disbursements straight on, the share price will approximate toward par, and the stock, as time goes on, will become more and more absorbed by investors, the extent of such absorption depending largely on the quantity of stock outstanding. The history of the common stock of the United States Steel Corporation furnishes a good example of this state of things.

The investment valuation of a share by its security, its dividend rate and its absence of attached liability, offer the explanation of a fact which has puzzled many. It has been observed that a responsible trading company which, if sold outright to another merchant or merchants, would be expected to return, say, about 25 per cent yearly on the investment, when converted into a corporation, can be sold on an exchange or disposed of through other means of wide publicity, in blocks of shares, at terms which net the buyers often

less than 8 or 10 per cent annually, and which mean for the former partners very much greater sums than they would have been at all likely to obtain by sale of the concern while a partnership. Some years ago the large department store of Lit Brothers, in Philadelphia, incorporated and offered a trifle less than half the capital stock at about par, the size of the capitalization (\$2,500,000) being fixed so that at least 7 per cent dividends could be paid. The shares were readily absorbed on these terms, and have paid 10 per cent yearly from the start. It may safely be said that had half the partnership been sold to one or more purchasers without incorporation, such a price would have been wholly unattainable. Good stocks are not bought by investors to return partnership profits, but as places for the deposit and for income growth of funds.

But though the price of shares has a general connection with the income afforded, or expected soon to be afforded, yet, even in the case of excellent stocks, this connection is usually only general. The prices of stocks may fluctuate around a central figure, upwards and downwards, with no change whatever in the dividend rate or any likelihood of any, and with frequently no discernible alteration of moment in the business standing and prospects of the corporation. Pennsylvania, whose par is \$50, may sell one day at \$65 a share, or 130 points on the New York Exchange, which counts by percentage of par; the next month at \$70 a share, or 140 points, though, meanwhile, the business has not changed in value. From year to year prices

of stocks in the premier rank on the Exchange vary \$15, \$20, \$25 and more between high and low prices, while shares of less established value fluctuate still more widely. A comparison of the prices of 20 railway stocks on the Exchange has shown that the yearly fluctuation has been, on the average, from about \$20 to \$35 ever since 1900.

Thus, within the vague limit imposed by their security and dividend rate, the prices of stocks are truly arbitrary. They reflect the business standing of their companies only in a general way, till wholly absorbed by investors. Within the limits of their yearly fluctuations they are the reflection of the hopes, fears and necessities of traders in their money-making. Another instance of the influence of this mental factor is that when a stock for the first time is run up some ten or fifteen points in a day or so, to a new high level, it usually reacts violently on sales, to obtain profits, made by purchasers at some lower prices. It may be that the new high price is really justified by the business position of the corporation whose stock is in question. Usually this makes no difference. The quotation is too new for speculators to be "used to it" and to hold out for it or for something like it. But if, after this first advance and reaction, the stock should again go up to the previous high price, its fluctuations, even on the same number of realizing sales, will almost always be much less violent than before. Traders have become accustomed to the new high price, and this fact shapes a willingness before non-existent to hold out more firmly for it.

The capital of a speculator and the ease, difficulty or impossibility which he experiences in raising funds on his collateral necessarily affect his stock market position. So, too, his commitments are conditioned by the quantity of stock in the market for sale at a given price. Stock prices are thus made by three factors. There is, first, the mental element of the hopes and fears of traders as these arise from their knowledge and beliefs, and are expressed in their trading (chapters 3 and 4); secondly, there is the relation of speculators to the banks as it affects this trading (chapter 5); and, thirdly, there is the actual manner in which, at a given time, stocks are distributed and held, to be considered (chapters 6, 7 and 8). These three factors will be taken up in turn.

### III

#### **The Trend of the Market**

Besides the professional room traders, who speculate for their own account, all others who deal in stocks are necessarily customers of one or more of the brokerage houses possessing membership on the New York Stock Exchange. Some Exchange members prefer to handle bond rather than stock transactions, some have a limited and old established clientele with which they are content, while others make every effort to attract business and to open accounts with anyone of means with the desire to trade in securities. This latter sort of houses, especially, has frequently branch offices in the upper part of New York City as well as in out-of-town localities, such as the chief Eastern and Middle West cities.

The great majority of a broker's customers dealing on margin trade in his "customers' room," so as to be posted by ticker or blackboard on the current stock quotations on the Exchange. The richest traders, however, usually transmit their orders over telephones, often by private wire, or by personal interview with a member of the firm. Great professional operators, moneyed individuals with interests beyond their own business, banks, trust companies and capitalists interested in corporation securities

—make up this wealthier clientele. Though the crowd which congregates in the customers' room of the brokerage houses is, man for man, usually much less well-to-do than the other customers as well as less farsighted, yet, in an advancing market it is often much more numerous. In boom times, such as the Spring of 1901 or most of 1905 and 1906, it makes up what is known as the public, while in less active times it may shrink down to semi-professional habitues of the stock market—men often with some slack occupation or who are, for a time or wholly, at leisure from other business.

Now, whether the market be watched by means of ticker or blackboard or by the trading of the brokers on the floor of the Exchange, experienced observers recognize that at times usually rather infrequent, the course of prices may be foreseen a day or two ahead from the character of the trading at the moment. In various ways the dominance of buying or of selling orders may be indicated. Such signs are of varied sorts, and those able to appreciate their significance might be at some loss to describe them on the spur of the moment. The character of the market thus expressed may be the effect of the orders of a number of interests working, unknown to one another, to the same or to similar ends; or it may be the effect of a concerted plan of a group of wealthy traders; or, again, both conditions may co-exist. Quotations may come faster or slower than previously, may show more or less steadiness or irregularity in the time of their appearance; may evince a change in the volume of transactions. Without entering into technicalities of these sorts,

it is sufficient to call attention to the fact that at times the trend of the market can be discerned for a short period ahead simply from its present action—the fact implying, of course, that the forces responsible for the present trend are not likely to pull up abruptly or to change their intentions.

Now, as commission house customers assemble to watch the ticker or blackboard it is on the current fluctuations of the market that their commitments are based. Whether they discern its immediate course correctly or not, all traders can always see one thing—whether the market is advancing or declining. It is on this single unequivocal fact that the great majority of the commitments in customers' rooms are made. The longer the market keeps going up and, consequently, the nearer it must be to its top, the more speculators—the more of the "public"—enter on the scene and buy shares, attracted by the great activity and by stories of gains and all hoping for still higher and higher prices. Thus whether successful or not, the great mass of commission house traders who attempt to discern the coming trend of the market simply from what it is doing at the moment, do not make the current trend themselves. They follow it. It is true that by this trailing behind the market, an ever growing mass of speculators have, at rather rare intervals, become responsible by their combined buying for a rise of prices to heights which, otherwise, they could not have touched. An instance of this sort of things was in April, 1901, though, even here, their uniform, if incoherent, action was sustained and directed by the concerted activity of

wealthy individuals and interests concerned in the course of prices. But in any event, no matter how the speculative "public" may enhance and protract the trend of the market, they follow it as it presents itself to them; they do not make it.

But if the public do not make the trend of the market, neither do the few hundred room traders on the Exchange floor, whose commitments are usually cleaned up over night. Of course, individuals among them may anticipate the course of prices and by acting on this anticipation help to create it. Moreover, it is true that this picked body of speculators discern the signs of the day-to-day trend earlier and far better than the average commission house customer; but, generally speaking, the fact that room traders are usually thus alert to seize the course of prices is, in itself, a statement that though they may reinforce this course, they do not make it.

It was noticed in a previous article that a stock tends to sell at prices which net something not very far removed from the rate of interest which would be expected on such security as it affords. But experience shows that investors, buying with the idea of security in their minds, are not very apt to buy when stocks are at very low figures, because the general business situation is then either strained or generally thought to be so, and the investor, above all things, wants security. Apparent exceptions to this rule will be found mostly to concern stocks of such speculative position that, even when held after purchase for the dividends they afford, the idea of income alone could hardly have been paramount in the intention of the

purchaser, else more conservative transactions would have been effected. It has been shown that strict investment buying is very small in amount compared to speculative and is very different in different stocks. The largest amount of investment buying occurs not when stocks are very low, but, rather, when they have about completed a rise, as 1901, 1905 or 1909. The relative stability of prices is then an inducement to buy, to the man who looks chiefly for income and who is not so much concerned with the quotation for the stock as with the steadiness of this income. Confirmation of this view is afforded by the fact that it has been at such times that the bond market which, of course, is dominated by investment buying, has been strong and active. When stocks advance too far, though their security is undiminished, they cease to be attractive to investors owing to the small net return they afford. This was the case in the fall of 1902 and in the opening month of 1906. At the former time, it has been computed, twenty-eight dividend paying railroad stocks yielded 3.2% on the investment, while, again, in 1906, thirty-nine dividend paying railroad stocks net on an average only 3.5%. Returns of these sorts are safer from bonds and savings banks. Thus, while investment transactions limit, in the end, the upward course of the market, they do not make its trend any more than do the commission house marginal customers.

It is thus evident that the speculators and the investors who go with the trend of the market, do not make it in

any instance. Evidently, then, the upward or downward trend must be made by speculators whose commitments take place when the market is either moving downwards or upwards, respectively, or is at a standstill. Such traders buy when prices are low and sell when they are high. The speculative investors who buy, as a rule, in odd lots and pay outright have already been referred to. From its yearly returns, the *Journal of Commerce* draws the conclusion that "American stocks were most widely distributed after the panic of 1907"; in 1906, its reports showed an average in all roads from which figures could be obtained, of 3,825 stockholders; before the panic, this number had risen to 4,627; after the panic it reached the number of 10,086, which in 1908 had shrunken to 5,647. At the end of 1909 it was 5,336. These comparisons are not exact, as the number of roads reporting to the *Journal* rises from year to year. For the present purpose, they are, however, sufficient. Such purchases and sales are the record of all the successful transactions during that period, which were registered in transfer books of the corporations. The great mass of others likewise successful were of the same type. Whether he be the buyer of two shares or of two thousand or of twenty thousand, it is the holder financially strong in proportion to the size of his holdings, and with the foresight to deal as just stated, who makes up the accumulated number of speculators on the right side of the market and who creates its trend.

Apart from "scalping" from room traders and others, successful commitments are, thus, not based on observa-

tion of the course of the stock market, only. Such observation, at the best, indicates fluctuations usually of but a day or two in duration; and the successful speculator holds his shares for a legitimate profit which generally takes much longer than a day or two to accumulate. The speculator, large or small, financially, who has the mental make-up which ensures his action on the right side of the market, is not the typical commission house trader, who pops in and out the market with every breath of rumor or short-time fluctuations on the ticker. In the most general sense, it may be said that, whether made by "bargain hunters" or by wealthy magnates, successful commitments are based on the expectation of business improvement, or, in the case of short selling, of business depression. Of course, such expectation is more or less explicitly thought-out and more or less exact, according to the character and the knowledge of each trader. After a severe business let-up, as in the opening months of 1908, the same actual amount of goods, except in so far as consumed, are in existence as before; so, too, the same amount of money on which to base credit transactions, except in so far as gold may have been exported or imported. But buyers and sellers have gotten out of touch with one another. The producer cannot find a quick market for his commodity, the consumer has more than he wants—at least at the old prices. Hence, a picking up of business after a depression is a resumption of the demands of the great consumers, those, for instance, of iron and copper. Large crops tend to force the resumption from the side of production by the amount of capital they

evoke from the earth. A foresight of a revival of trade in the steel and copper trades and of the advent of large harvests are the expectations on which when financially backed, long upward swings of the market are normally based.

The beginnings of recuperation in the great industries are not, however, so evident to the outsider as they are to those experienced in the trades themselves. A great mass, if not the majority, of successful "public" commitments, are, therefore, probably based more on the general fact that stock prices, judged by net income returns and by the financial status of corporations, are too high or too low, than on more special knowledge. Great corporation interests and their immediate circles can see more clearly and more definitely. Prices of the United States steel stocks began to improve, in 1904, some months before outsiders could discern an improvement in the iron industry. Again, Amalgamated Copper shares reached what were practically top figures in the opening of 1906, a full year before the price of the metal had attained its apex. The same stock (in company, of course, with the rest of the market) began its downward journey in 1907 before the price of the metal began to break wide open. In all three cases, the conditions in the trade were foreseen by successful "inside" traders in the stock. The capitalists in a great corporation are likely to foresee better than others the coming expansion or contraction of their business. But the industries of a country rise and fall pretty much together. Thus, apart from preconcerted action (which may also obtain), the great moneyed

interests of the country, desiring to profit by a rise in the business status of the trades with which they are affiliated, act to the same end in the stock market, at the same or nearly the same time.

Thus, in the case of each class of traders considered, their stock market commitments arise from their knowledge or beliefs as these arouse their hopes and fears. The commission house customer bases his beliefs on the trend of the market as he sees it from day to day, seconded in his decisions, possibly, by other considerations equally uncertain, such as the hearing of "tips." The investor grounds his purchases and sales on his wish for security and for a fair sized net return, while the thoughtful speculative element of the community—the "speculative investors" and "wise" marginal traders—act hand in hand with the great capitalists in perceiving the right time to buy and the right time to sell to obtain the wished-for profits.

There are always two sides to the market: the wrong side and the right side. Those on the right side are always opposed to those who are wrong, gaining where they lose or where they fail to gain. But this opposition, as a general individual rule, is not intentional, though the fact of its existence may be relied on by those who foresee correctly; but it depends, in the end, on the fact that the one side, in being right, must necessarily be opposed to the other side, in being wrong. Where the former buy or sell or do nothing, the latter do one of the three when something undone was the proper course.

## IV.

### **The Priority of Stock Prices**

After a period of commercial depression, such as that which occurred in the early part of 1908, stocks begin to advance in price before a recovery in trade becomes manifest. Likewise, as in 1907, share prices fell previous to the coming of commercial disaster. This fact is known as the "priority" or "anteriority" of stock prices, or as the process by which the stock market "discounts" the future. The general proof of the occurrence of this situation is best given by a comparison for years past of bank clearings and gross railway earnings with stock prices. Of all the indices of general prosperity or of general depression the country over, none is so immediate and so certain as the quantity of bank clearings, because this quantity is nothing but the amount of cheques which change hands, or the very aggregate sum of all important sales themselves. The following table gives the bank clearings of the United States by months since 1900, six ciphers being omitted in each number, so that, for example, the first month's clearings in full should read \$7,643,000,000:

## U. S. BANK CLEARINGS.

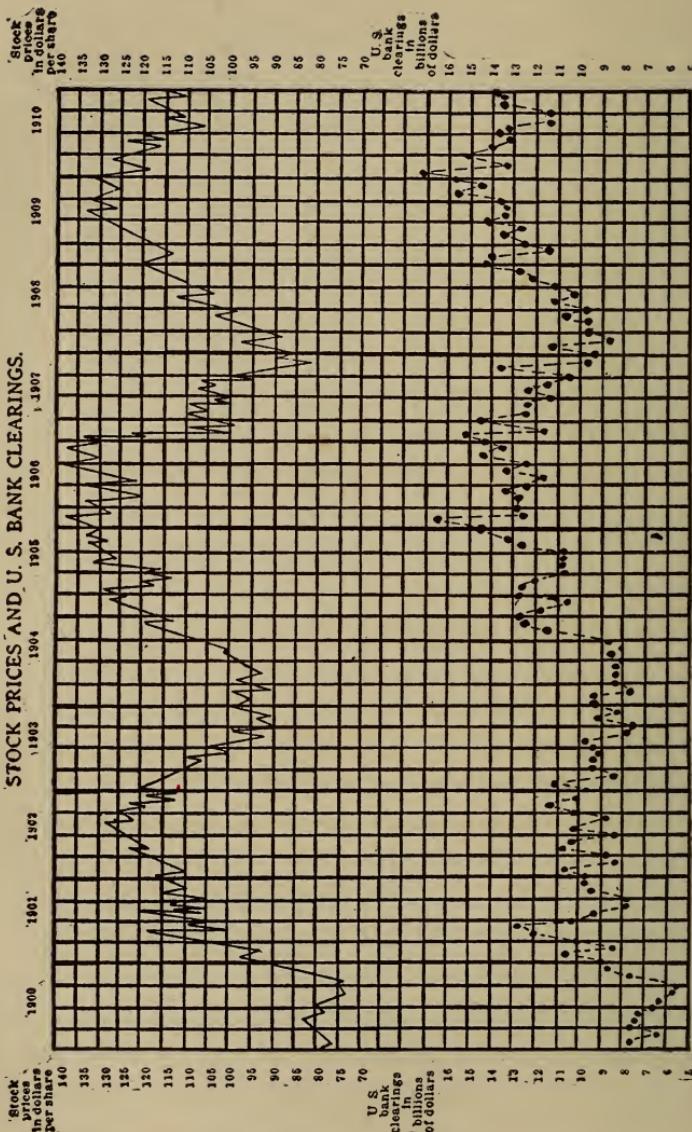
	January.	February.	March.	April.	May.	June.
1900.....	7,643	6,432	7,625	7,472	7,310	6,667
1901.....	10,716	8,358	10,003	12,010	12,825	10,105
1902.....	10,659	8,359	8,882	10,926	10,386	8,208
1903.....	11,088	8,468	9,582	9,581	9,118	9,422
1904.....	9,436	7,713	8,383	8,309	8,215	8,058
1905.....	11,848	10,650	12,918	12,735	12,059	10,815
1906.....	16,321	12,462	12,993	12,884	13,218	12,230
1907.....	15,020	11,792	14,625	12,636	12,382	11,136
1908.....	11,359	8,756	9,777	9,764	10,858	9,825
1909.....	14,035	11,244	12,606	13,664	12,889	14,134
1910.....	17,136	13,105	15,017	14,001	13,142	13,810
	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1900.....	6,256	5,707	5,626	7,621	8,758	9,071
1901.....	9,369	7,990	7,971	9,536	9,853	9,810
1902.....	10,170	8,943	10,157	11,357	10,087	9,894
1903.....	9,767	7,921	7,673	9,176	8,169	9,295
1904.....	8,660	8,008	8,844	11,509	12,505	12,804
1905.....	10,866	10,902	10,885	12,624	13,149	14,452
1906.....	11,639	13,131	12,497	14,529	13,633	14,265
1907.....	12,348	11,527	10,551	13,779	9,659	9,407
1908.....	11,071	10,248	11,112	12,136	12,975	14,364
1909.....	13,450	13,494	13,523	15,851	14,761	15,843
1910.....	13,287	11,508	11,361	15,787	13,595	13,932

The accompanying diagram gives a graphic representation of the course of the two series. The amounts of the bank clearings are derived from the Financial Chronicle's compilations; the stock prices are the average of the twenty roads whose quotations are reported in this form day by day by the Wall Street Journal.

In examining the table and diagram it should be remembered that the winter months are likely to show heavier business dealings than the summer months. The truest comparisons, therefore, are of the clearings of a month with those of the same month in the previous year —something shown at once by the table.

It will be seen, first, that general business activity, as

STOCK PRICES AND U. S. BANK CLEARINGS.



Each square represents one quarter of each year. Upper line shows average price of 20 railway shares from 1900 to 1910. Lower line shows amount of United States bank clearings, months by month, during the same period; each dot indicates the amount for the month it represents, beginning January, 1900.

measured by the volume of clearings, has been preceded by a rise in stock prices and that general business depression has been preceded by a fall in the prices of securities. Thus, the rise in stock prices in 1900 began in the early fall, when clearings were at their lowest, and culminated for a time in April, 1901, after which prices reached their extreme top in September, 1902, after a year and a half of backing and filling with an upward trend. But, comparing the bank clearings, month by month, it will be seen that each month's record was higher than that of the corresponding month of the previous year till after the opening of 1903, the only exceptions being a few months in the bull market of the first half of 1901.

Stock prices reached bottom in the latter half of 1903, when bank clearings had just begun to fall off largely, and had risen many points by September, 1904, when bank clearings picked up quickly. Compared with the months of previous years, clearings did not show signs of falling off again till August, 1907, although stocks had then been going down for months and had, indeed, reached their top point, some in the "Union Pacific boom" of August to October, 1906, some in January of the same year. Till the middle of 1908, clearings showed a steady falling off, though stocks had been rising since November of the preceding year in many cases, and in all, since the opening of 1908. Again, stocks began to fall after August, 1909, but clearings not till a year later. It will be noted that the fall in stock prices in 1903 was not followed by so extreme a commercial depression as

in 1907. Business was, relatively, but slightly affected.

If, during the ten years under consideration, railway gross earnings be examined, the priority of stock prices to commercial conditions as reflected by these earnings will again become manifest. Railway earnings by registering the distribution of commodities are next to clearings probably the best index to the status of general business. The following table, compiled from the Financial Chronicle, shows the percentage increase or decrease in gross earnings for every month since the beginning of 1900, over the corresponding month of the preceding year. As the same roads have not always reported in each month during this period, and as the Chronicle has been able to give much fuller reports in recent years than formerly, the table is not minutely accurate, though more than sufficiently so for the present purpose. In all months the returns include those of the greatest systems and cover usually from three-quarters to four-fifths of the whole country's mileage.

PERCENTAGE VARIATION OF RAILWAY GROSS EARNINGS  
OVER CORRESPONDING MONTH OF PRECEDING YEAR.

	Jan.	Feb.	March.	April.	May.	June.
1900.....	15.14	19.86	12.50	12.69	10.67	9.23
1901.....	7.94	7.50	7.43	8.94	9.41	6.80
1902.....	7.61	3.92	6.30	11.03	9.18	7.16
1903.....	9.40	13.86	14.42	13.67	11.98	14.02
1904.....	—4.55	2.60	—0.06	—3.18	—2.77	—0.81
1905.....	6.58	—3.01	9.73	7.35	11.09	9.66
1906.....	20.88	26.36	10.61	6.78	9.83	12.11
1907.....	6.51	6.05	9.65	21.45	18.12	13.59
1908.....	—12.49	—11.79	—13.37	—18.89	—22.67	—18.47
1909.....	5.54	8.34	12.13	12.50	15.58	14.33
1900.....	3.86	6.14	2.21	5.03	2.14	9.05

1901.....	3.40	12.67	10.46	11.87	12.22	5.65
1902.....	7.65	4.76	9.55	6.71	6.97	9.86
1903.....	11.96	9.18	6.98	5.34	4.03	4.66
1904.....	-5.35	0.51	2.81	3.21	9.51	7.20
1905.....	10.02	9.23	9.28	8.54	10.35	9.64
1906.....	13.73	12.11	7.58	10.77	6.24	7.90
1907.....	14.28	12.27	9.71	8.56	3.14	-6.20
1908.....	-14.87	-16.64	-6.23	-6.95	-2.92	5.42
1909.....	12.66	14.35	12.35	11.80	16.51	6.39

It will be seen from this table that stock prices were falling during 1903 and 1907, while at both times gross earnings were expanding largely. And that, when earnings began, in 1904 and still more so in 1908, to fall off, they continued to decrease long after stocks had reached bottom and were again commencing to go upwards. This is very clear in 1908, when earnings, which did not begin to fall till after the end of the financial panic in October, continued to decline till the very last month of 1908.

But while the priority of stock prices to general business expansion and contraction is thus unmistakable, and while from the point of view that in a bull market this priority is the expression of speculative foresight, it seems not only reasonable but almost inevitable, from another standpoint this priority of prices appears a paradox.

Stocks are bought for investment and for speculation. But both investment and speculative purchases, whether made by individuals or by corporations, are made, in the case of new commitments, out of their surplus capital—with resources whose use is not essential to the maintenance of the company or individual and

which are not already tied up. In other words, it would seem that shares could be bought in large quantities at advancing prices only when there is much spare capital on hand with which to buy them, and that this could be the case only when commercial prosperity was well in the ascendant. In the same way, it might be expected that the pinch of commercial stringency would have to be felt before investment and speculative holdings began to be sacrificed in large amounts. Far from "discounting" the future, it appears, from this consideration taken by itself, that stock prices should do the reverse—should have their variations preceded by the business changes. To explain this apparent contradiction, some facts regarding marginal accounts should be kept in mind.

In the usual brokerage transaction it is customary for the speculator to supply about ten points of the stock price, for the broker to supply an additional ten points, and for the remaining sum to be lent by the broker's bank against the re-pledge of the customers certificates as collateral security. On the whole, it may be said that the New York national banks, which, as a rule, handle nearly all city loans of this sort, lend from about 75 per cent to 80 per cent of the funds to finance the carrying of stock for a rise. Let us see how this affects the course of prices.

Stocks, as has been seen, begin to rise before the advent of renewed or of greatly enhanced prosperity. At such times, they are in the strong hands of investors, of speculative investors and of individuals and groups of speculators, mostly wealthy, but, in all cases, able to

carry easily the shares, few or many, which they hold. A portion of stocks, both dividend paying and otherwise, is held by them, as at other times, for purposes of corporation control, and is, consequently, not for sale. But besides this stock and that of the genuine investors, the remaining shares, held for speculative purposes, are carried by owners firmly believing in an appreciation in prices. The existence of this confidence at such times is not a more or less probable fact; it is a definite certainty; for those who do not have it, or who have not had the capital to hold stocks, have necessarily sold out by the end of a long decline. It is a case of the survival of the fittest.

When stocks are thus in strong hands, after falls of many months, such as those of 1903 and 1907, a period of dullness is likely to precede an upward movement in quotations. Thus, August and September, 1900, both dull months, preceded the great bull market of 1900 to 1901; May and June of 1904 were followed by the bull market of 1904 to January, 1906, while, finally, dullness of November, 1907, signallized the end of the long decline of that year. After a rise in December, renewed liquidation of weak holders, watching their chance to get out as best they could, brought about another decline in January, 1908, to be followed again by a dull February, after which the long advance of 1908 to August, 1909, began. Facts of the same sort, on a lesser scale, are true of the shorter swings of the market. Dullness occurs after the end of a fall because offers to sell stock have

ceased to predominate over bids to buy, while both have greatly lessened in number and importance.

It being to the interest of a bank to lend on collateral as much as is consistent with proper security and, as in times of dullness following a long decline, great quantities of stock are carried by banks for wealthy and influential depositors—often their own stockholders and directors—policy as well as the knowledge of the low range of prices obtaining induces banking institutions to be liberal in their loans.

At the beginning of an upward movement of large extent—of which the months named above offer good instances—the stock carried speculatively is, when not held outright, often pledged directly with banks instead of through brokerage houses; indeed, the remark of a broker has become well known, namely, that the only sure sign of a long advance in the market he had ever been able to detect was when commission houses carried little or no customers' stock for a rise. When stocks begin to move upwards, the price has to be frequently bid up a fraction to effect a purchase. There is an inclination, especially among the room traders, rather to buy on a quarter's advance than to sell on a quarter's recession. And this feeling growing, slowly or fast, prices rise while the volume of sales swells in size over that of the dull period.

In an advance from low prices to high such as occurred in the three years repeatedly referred to—1900, 1904 and 1908—relatively few men, even of the wealthy, on the right side of the market have a definite idea of how

long the advance which they foresee will persist. Experienced stock market observers, however, find that pressure to sell stock has ceased and that offers of short sales produce little or no effect on the market, as the offers are readily accepted at every concession of a fraction and are with difficulty covered, save with a loss. Everyone soon accepts the basic fact that the market has reached bottom, in other words, that no one wants to part with shares at the prices obtaining.

The speculative impetus in an upward movement is made possible by the aid of the banks. A stock in which there is no speculative interest, assisted by bank funds, moves with extreme sluggishness from year to year, and follows the market very slowly and quietly. Such a stock was Western Union up to 1907, when it fell heavily, probably through investment liquidation, aided by short selling. The company lost very much business in 1908 and finally cut the dividend.

The priority of a decline in stock prices to a decline in general business is as certain as the converse situation just discussed, but the business depression does not necessarily take place on such an extended scale as might have been conjectured by an observer of the decline in the stock market; for instance, the stock decline of 1903 was so much more severe than the commercial decline that this fall in share prices has been spoken of as a "discount" by the market of a situation which never eventuated. Although in a stock decline preceding a business contraction the element of foresight leads some investors to sell the stocks owned of such companies as

they think may decline in prosperity, and although such liquidation may be strengthened in its pressure on the market by short selling, yet the priority of a long decline in share prices (as aside from the fact of the decline itself) is caused by other factors involved in the relations of the banks to stock prices. (See next chapter.) Here, it will be sufficient to say that just as relatively great dullness precedes an advance, so relatively great activity at the top of an advanced or advancing market, other things being the same, is likely to precede a decline; and, in a declining market, to mark its consummation, for the moment or for good. The top points in April, 1901, September, 1902, January and August-September, 1906, are evidence of this as far as extended swings are concerned, and it will be found to be true of swings shorter in duration; although other factors seem more frequently to interfere with the working of this principle than with that of the converse one of dullness preceding an advancing market. Activity at top notch figures for any time is generally the distribution of stocks by those who are on the right side of the market at that time and who are taking their profits by sale to the less farsighted. But why it should be apt to be followed at once with a fall without an intervening period of dullness, as is the case at the beginning of an advancing market, will appear more clearly later on, when short selling is discussed in full. It should, however, be said at once that there is nothing whatever to the nature itself of the stock market to prevent dullness being followed by a decline as well as by an advance, and that

this sometimes happens. Thus, both February, 1907, and February, 1908, were dull months relatively to those before and after, but the former was followed by the great smash-up of March, 1907, and the latter by the beginning of the upward movement for 1908. Simply, certain general characteristics of rising and falling markets cause dullness much more frequently to precede rises than falls.

Thus the priority of stock prices receives an explanation as far as an advance is concerned through the assistance given to speculation in stocks by the banks. Banks always have most to lend when the rest of the country has least. While the speculative funds of investors and speculators are smaller in depressed than in inflated times, this is not true of banking institutions. The more business a bank does, the more its loans rise in amount, and the more difficult does it become, because of legal restrictions, to add to them. But the less business it does the more spare funds it has on hand, and the easier it is for it to make a loan. As the bank lends up to a certain percentage of the exchange price of a stock, the burden of the increased valuation of the stock as soon as it begins to advance is borne by the bank, while the speculator, whose margin with the bank is the same or nearly so whether the price of the stock be 50 points or 75, does little more than register the advance in higher quotations and pay a slightly larger interest for the use of superadded funds as the share price advances.

If, for instance, a speculator has borrowed \$8,000 from a bank on a stock when it was selling at par and the stock rises on the Exchange to \$120 a share he can probably borrow \$2,000 more on the same stock, his only additional burden being the interest charge on this \$2,000. This "pyramiding" of loans on stock collateral, a very important factor in a speculative market, is more fully discussed in the next chapter.

## V.

### **The Banks and the Exchange**

The total amount of money held by all the banks in the country varies with the increase of Government coinage, with the imports and exports of gold, with the sum in circulation and with the amount of hoarding by individuals. From year to year the whole amount of money held by banks slowly increases. Indeed, it is evident that the actual money of a country, except as bullion or as precious metal, *per se*, is not of use in foreign countries.

In the absence of gold and silver movements, a general swelling of bank deposits (as distinct from a mere shifting of deposits from one bank to another) means that the banks are making more loans and are placing the proceeds of these loans to the credit of the depositors to whom they are made. When such loans are paid off, both the loans and the deposits arising from them are cancelled together. In the event of the winding up of a bank's affairs, the liquidation of its loans is a necessary preliminary to the payment in cash of its depositors, though the majority of the deposits are ordinarily cancelled through the payment of the loans by which they came into existence. Before the great development of banking in the nineteenth

century, a bank loan was generally a loan in the popular sense of the word; the borrower either received actual money or bank notes or drew actual money from the bank as wanted (as he may, of course, still do). But in coming to lend far beyond the amount of money which they possess at one time, banks have come to lend what is really credit, not money. A bank loan has really become a publicly received endorsement that a borrower's security—stock collateral, notes or his own responsibility—has, at least, such and such a present cash value, which the bank permits him to barter, by means of checks, for such other goods as he desires, instead of obtaining these goods by the clumsier and often impracticable methods of the tender of promissory notes, shares, or by waiting for the indebtedness to him of others to mature.

While in theory a bank's loans might expand to any amount provided they be made on proper security, in practice loans are limited in amount both by a popular misconception of the real nature of a bank loan and by Federal and State laws. National banks in the three "central reserve" cities (New York, Chicago and St. Louis) are required by Federal law to keep on hand in money (specie and legal tenders) 25% of their deposits. Any money over and above this amount is known as the bank's surplus reserve. By this law a limit is placed on the ability of banks to increase loans beyond a certain amount. For, as soon as a National bank in New York lends when its reserves are just

25% of its deposits, either (1) this new loan is placed as a deposit to the credit of the borrower and then the bank has less than the required 25% of deposits in money; or, (2), the loan is paid out and then the cash reserve is depleted that much and falls below the required 25% figure, again. As no bank wants to reduce good deposits save through the extinction of loans, it can increase its lending capacity otherwise only through obtaining more actual money, else it must keep its loans within this percentage.

As a bank's deposits arise from its loans and from the receipt, in the end, of actual cash against such deposits as are not offset by the outgo of other cheques through the clearing house or otherwise, every payment of a loan reduces the deposit account of a bank toward the point where it is covered entirely by actual money. These deposits arising from loans, it may be noted, have their real nature better understood in Europe, where they are carefully distinguished, under the title of "current accounts," from deposits of actual money or of cheques on other banks.

The total deposits the country over have thus against them loans, money, and other resources (such as stocks, mortgages, etc.) belonging to the bank. When deposits in a bank fall in amount below loans, this means that money has been withdrawn from that bank against these loans, against other deposits not arising from loans, or has been invested by the bank itself. But when loans are greater than deposits it also means that the sums so

withdrawn must be greater than the sum of all remaining deposits which do not arise from loans.

In the three central reserve cities, National banks must keep, as already stated, 25 per cent of their deposits in money in their vaults. In the reserve cities, including the large municipalities, National banks must keep the same reserve, but instead of retaining it all in their own vaults they may deposit one-half of it in National banks in the three central reserve cities. The country National banks must keep 15 per cent of their deposits in money as a reserve, but of this 15 per cent, three-fifths may be deposited in National banks in the reserve or in the central reserve cities. Thus, the country National banks need keep on hand in actual money only 6 per cent of their deposits, and banks in the reserve cities need keep on hand in actual money but 12½ per cent of their deposits. Now, as money is very frequently easier to lend in New York than elsewhere, this situation brings it about that many interior banks leave large balances, as part of their legal reserve, with banks in New York City, and, to a lesser extent, with banks in Chicago and St. Louis. But this money is counted by the National banks in these three cities as part of *their* legal reserve. Hence, when a call from the interior banks for this money is made to replete their own reserves, such a call entails a great and immediate drain on the reserves of the National banks in the three cities mentioned, and especially in New York.

Every year such a drain occurs sometime in the Fall. To move the crops, farm hands must be paid in cash, and

to get this cash the interior banks are drawn on. These having but little money on hand draw on their balances in the reserve cities and in the central reserve cities, but chiefly in New York, where the great balances of this sort accumulate. The result of the situation is, that if a great demand for cash arises in New York at the same time as a great demand for cash in the interior, the New York banks bear the brunt of the situation. At such times, as in 1907, to get money New York banks must import gold from abroad or get it from the United States Government by its deposit with them of Government funds.

In Europe, when a great demand arises for actual cash, the banks issue bank notes to meet the drain. European bank notes may be issued against discounts of commercial drafts or of drafts accepted by a bank. The brisker business is, the more such paper will come to the banks for discount or for loan, and the more credit balances will increase or the more bank notes will be paid out, as wished by the seller of the draft. In times of a panic, when the demand will be for cash, bank notes will issue to meet such demand. Of such an elastic currency system there is hardly a trace in America, though the Aldrich currency plan submitted to the National Monetary Commission early in 1911 will probably lead to action by Congress along such lines. But, as things stand, our National banks can now issue bank notes only by first buying Government bonds, then depositing these with the United States Treasury and taking out in return bank notes equal

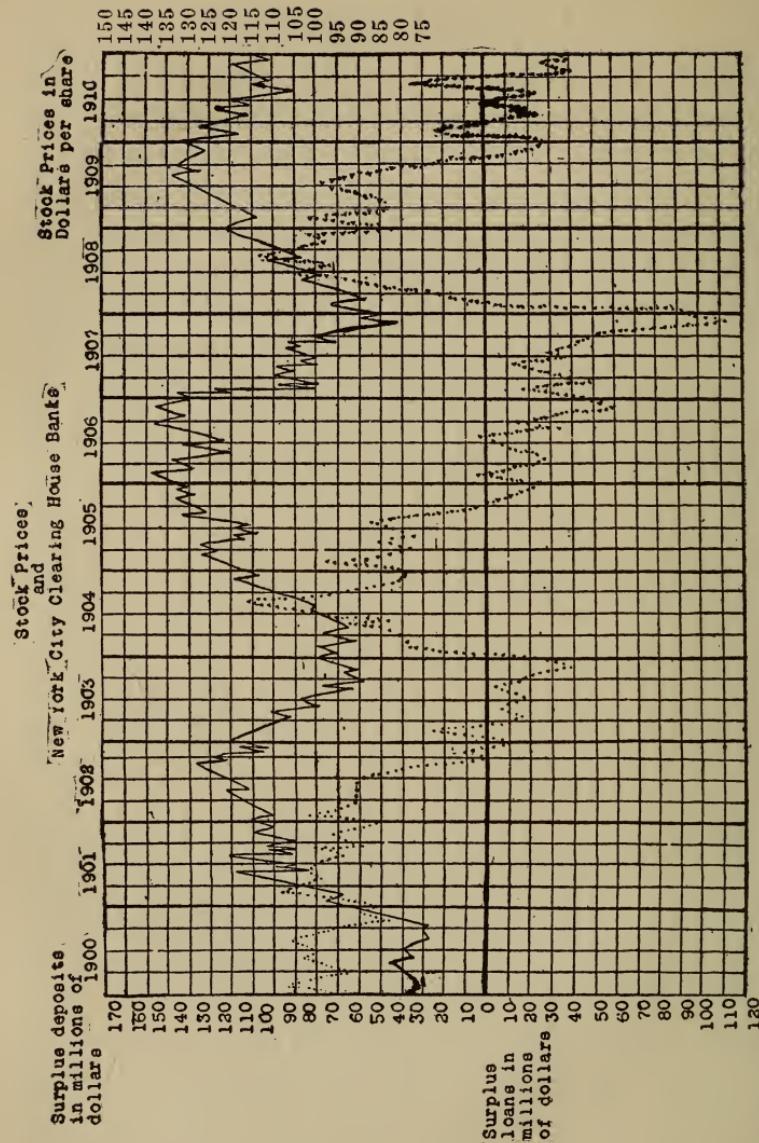
to their face value. As the bonds cost more than their face, or par value, in the market, this usually involves a loss to the bank unless current interest rates are so low that it can recoup by means of the interest paid it by the bonds. But this situation also withdraws money from the banks which they need as reserves against their deposits. It takes more than \$10,000 for a National bank to take out \$10,000 worth of bank notes, but this \$10,000 if held by the bank might have been a reserve against \$40,000 of loans in New York, if these loans were placed to the depositor's credit, *i. e.*, if he did not want to withdraw actual money for his loan. Evidently, just when we need bank notes most—in times of panic—the banks have to hold on to every cent of their money as a reserve to cover their deposits.

We may now take up the connection of bank loans in New York with stock exchange collapses. To understand this thoroughly, the function of call loans in the New York money market must be taken into consideration. A stock market rise, as has been seen, involves the extension of credit by the banks against securities to about 80 per cent of their price on the Exchange. Now, when New York banks have liquidated many of their loans, cleaned up the deposits based on them and received back on deposit from the interior a large amount of money as reserves for the interior banks, or for the sake of metropolitan investments, the New York banks have large reserves against which large credit loans—large "current accounts"—may be made. This is their position at the

wind-up of financial crises generally. When this is the case, the deposits of the New York banks will show an excess in amount over their loans. This excess is known as the "surplus deposits," and it may be worth while, first, to note its variation compared with market fluctuations.

If the diagram be examined, the relations between surplus deposits of the New York national banks and stock prices will be apparent almost at a glance. In 1902 and in 1905 to 1906 falling surplus deposits precede falling stock prices. In 1903 to 1904 and in 1907 to 1908 rising surplus deposits precede a stock appreciation. The facts can be examined closer and the same relation will be found to hold. In 1903 and 1907 the surplus deposits reached their highest *minus* point at just about the culmination of the decline. Again, they were highest, positively, in 1901 before the great Spring rise of that year, in 1904 when they furnished the ammunition for the bull campaign of 1905, and since the end of 1907 when they shot up like a rocket, at the beginning of 1908.

Why an excess of loans over deposits is undesirable from a stock market standpoint may be still clearer from the following considerations. The loans of banks at such times may be, it is true, thoroughly sound, and even beneficial as far as the banks are concerned. But such a condition necessarily implies that some of the deposits (arising from the proceeds of the loans) have been depleted by the withdrawal of actual money. Should the banks in question, in such a situation, call



Continuous line represents average price of 20 railroad stocks;  
 Dotted line represents surplus deposits when above zero;  
 Line below zero represents loans.

their loans, a greater or less number of customers will be unable to cancel their indebtedness by drawing checks against their credit balances—a liquidation of their securities pledged as collateral for their loans will be enforced, with a depressing effect on prices of securities, as explained more fully in the following paragraphs.

In Europe the bulk of bank loans are made on commercial transactions. The seller of goods draws on his bank, his draft is accepted by his bank and may pass by endorsement through many hands or may be discounted by a note dealer and afterwards re-discounted by a central bank. In America the promissory note of a purchaser of goods may be endorsed by the seller of the goods and discounted at the latter's bank, but there the matter ends. The bank can do nothing with the note till its maturity. Drafts on a bank accepted by the bank and made the basis of discounts and re-discounts by other parties are practically unknown with us. This primal difference between the practice of banking in Europe and in America is the cause of the fact that with us a vast bulk of bank loans is made on securities listed on the stock exchanges. From this fact another of great importance flows. In Europe stock settlements are made fortnightly or monthly, but on the New York Stock Exchange they are made daily through the Stock Exchange Clearing House. Hence the necessity in New York of constantly shifting, extinguishing and remaking loans

concurrent with the sale and transfer of shares carried by brokers on margin. From this situation has developed our call loan market on stock as collateral, which has no analogy in Europe, where loans on stock, following the course of the fortnightly stock settlements, are made for two weeks or longer.

Call loans on shares in America are payable on demand by the lender; or, more collateral may be demanded or a higher rate of interest, or both, and a new loan made. By Chapter 237 of the New York State laws of 1882, call money rates may be of any percentage on loans of \$5,000 and upwards. If, in the case of the call of a loan, the money or more security is not forthcoming, the collateral may be sold by the lender to defray the loan. So, too, with time loans on stock, it is provided that if the lender wish, he can demand more stock as collateral before the maturity of the loan. Now, in times of large surplus reserves (over 25% of the deposits) the banks make time loans at low rates of interest very freely on stock exchange collateral. Through the aid of these loans stock prices advance on the Exchange (as outlined in the preceding chapter), and, having thus advanced, more money is lent on the same security, on the basis of the higher prices which the prior loans have brought about. In other words, by "pyramiding" their loans on stock exchange collateral, banks create the very valuations on which they rely to lend. As loans expand, call money rates may advance. Finally, when, through

the drain from interior points or from other reasons, the New York National banks can no longer increase the amount of their loans without falling below their 25% surplus reserve mark, they may begin to restrict loans both by increasing the rate of interest and by demanding more and more stock collateral of the same sort for a loan of the same amount. But these demands of the banks for more stock collateral or for settlement of their loans, bring about sales of shares on the exchange to effect the cancellation of the loans—the sales, of course, being largely of the collateral pledged by the borrowers with the banks making the calls. At first, this stock may be mostly that of weakened brokerage accounts carried on margin, but rehypothecated by the brokers carrying it with their banks. But such sales causing a fall in prices by the selling offers which they occasion, more loans are called by banks, as the collateral with them is now below its former nominal value as estimated by the exchange quotations. Thus, more and more collateral is called for, to secure already existing loans and to cover the shrinkage in exchange valuation brought about through the previous calls. And this recurrent process may continue until the lending power of the banking community is restored by the influx of actual money from other localities or until the loans and deposits, lessening hand-in-hand, become low enough to raise the surplus reserves well above the 25% danger line.

Thus, by their reliance on stock exchange quotations as measuring the true value of the stock collateral which they hold, the banks build up the very exchange prices on which they rely to lend, and, again, when they are in strained positions, they, themselves, destroy those very prices. Here, then, is a main cause of the priority of our stock market declines to commercial troubles; the banking strain seeks relief by throwing off its stock market burden, inducing liquidation, and, in doing so, it crumbles stock exchange quotations. Only a minor part in the matter can be granted to those traders who, foreseeing and accompanying with their commitments the genuine sales brought about by the banks' demands, sell stocks short to accelerate the decline.

But it is possible that a great fall in prices, though dependent on the connection of bank loans with speculation, may start from the side of the speculators. It may, in other words, reflect not so much a weakened condition of the banks as an over-extended position of speculators brought about by previous over-extended bank loans. The exploitation of vast enterprises in America has had the effect, again and again, of tying up liquid capital; or, to speak more concretely, of bringing about a situation where, at current prices, goods of one sort were not readily exchangeable for goods of other sorts. Such was the case as regards exchange securities in 1903. In that year the "undigested securities" which their nominal owners could

neither hold outright, sell to others at current quotations nor carry any longer on banking terms, were mostly listed on the Exchange. In 1910 the over-supply was more of securities of other sorts into which the surplus capital of the country became largely drawn, leaving too little to absorb standard issues at previous prices, when they were offered for sale.

In Europe, it is true, the same custom prevails as with us of lending on the basis of the bourse valuation of a security. But as our call loan system on stock as collateral does not obtain there, the same drastic situation is not occasioned. Loans on shares in Europe being made from fortnight to fortnight, or from month to month, are, for that length of time, based on a valuation which they, themselves, will not help to alter in the meanwhile. Moreover, European banking conservatism will not lend on the basis of bourse prices where these differ radically from true values.

Call loans in New York City have been stated by an authority as about 35 per cent of all loans on securities. They are particularly plentiful both in times of financial ease and of financial stringency. In the former case, borrowers prefer to accept funds in this manner to get the advantage of the lower interest rates, and also, because, as the banks are then strongly entrenched, there is practically no apprehension of loans being called or more collateral being demanded. The banks, also, have then no objection to lending on call, as a call rate can be advanced at any time, if it

should become expedient to do so. On the other hand, in a stringency, banks prefer call to time loans because they can raise the rate of interest as much as they please or close the loan for good instead of demanding more collateral, if they wish. Finally, when money is neither very easy nor very tight, borrowers prefer time loans because of the more reliable condition of a fixed rate of interest, while the banks, on their part, have as yet no objections to accommodating them in this way.

When surplus reserves are high, call money rates are likely to be low, and vice versa. The point cannot be pressed too far, because banks sometimes show singular inability to provide against a coming crisis and continue to lend over-freely much too long. Again, at a time when there has been much liquidation, call rates may become low, as the loans already made are strongly buttressed and there is little demand for new ones. The period between 1900 and the present time, however, illustrates the relation sufficiently well. It may be thought that time loans on commercial paper are likely to exhibit banking difficulties even better than those on call on collateral, as the demand for commercial accommodation is more genuine and is not to be disguised through the medium of nominal quotations or through the advent of times when few loans are demanded. Both sorts of loans, however, point in the same direction. The table at the end of the chapter shows the highest rates of call loans each month,

the highest rate for time loans on stock exchange collateral and the range of rates on choice double name commercial paper for 60 to 90 days.

A drain on reserves precedes a panic, and this drain is unlikely to cease till the panic's very end, when the situation is relieved by a drastic clearing up. Money rates are thus apt to be at their highest at the very height of a financial crisis, as in the Fall of 1907. But it does not follow in general that because rates are high, the stock market must immediately turn. Speculators can pay high rates if they wish, just as long as the banks will lend on the collateral tendered. Again, the coming of easy money may be "discounted" by speculators, willing to pay, temporarily, very high rates—witness the instance of December, 1905. Once more, the size of the surplus deposits or of the surplus reserves may suggest the coming of very high rates and of much calling of loans, and speculators on the long side of the market may get out of their commitments and onto the short side before the arrival of the conditions which they foresee. Money rates, by themselves, are more often the symptom of the momentary condition of the banks than they are any sure sign, either of an immediate expansion or contraction of credit or of stock market movements.

When the lending power of banks grows less, the stress of the situation is apt to fall on wealthy interests—estopping their plans of finance or reorganization and preventing them from taking up new ones.

The speculation in the early Fall of 1902, engineered by Messrs. Talbot J. Taylor & Co. in Southern Pacific and by Mr. John W. Gates and associates in St. Paul and other stocks, came to an end through the inability of the speculators to secure further loans from the banks. "The demands, both of legitimate business and of the speculators," says Mr. Henry Hall in his study of "Two Stock Market Culminations," "had utterly exhausted the loaning power of the American banks. Five brokerage houses in New York had alone borrowed \$100,000,000. Mr. Gates hurried to London, in September, hoping to secure further advances of money at that center to go on with the bull campaign. He was unsuccessful. At the New York Clearing House banks, surplus deposits had fallen from \$98,000,000 in 1901 to \$1,300,000 in September, 1902, going below zero the next month. Surplus reserves had vanished; and there was an actual deficit in the week ending September 20. The natural consequence was tight money. Call loans touched 8, 20, 20, 25 and 35 per cent in successive weeks, and for time loans 7 per cent was demanded." This was the beginning of the great decline of 1903.

Again, in the same brochure, the same writer proceeds as follows: "In the Fall of 1906 the position of the banks was frightfully strained. Call money touched from 12 to 36 per cent in every week in November and December, and while stocks reacted in consequence, in the latter months of 1906, eminent financiers refused

to believe that the bull market had ended, or lay aside their plans for railroad deals of various sorts. They made a diligent effort to induce President Roosevelt to modify his hostility to corporations or to issue some statement, which would reassure investors. They also tried to secure an emergency currency law. Failing in both completely, they finally resolved definitely to let matters take their course. In 1907, a few more prominent corporations increased their dividends and manipulation was continued, all for the purpose of holding the market as strong as possible, but meanwhile there was a quiet but persistent and tremendous unloading of stocks by pools, inside interests and market operators"—prior to the great fall of the year which, to a greater or less degree, they foresaw.

As the relation of the banks to the Exchange is at the very bottom of an understanding of the stock market, it may be well to recapitulate the argument of the present chapter. A bank loan is a loan of credit based on goods sold, on personal responsibility or on collateral. Bank loans in New York are limited by the provision which compels the national banks to keep in money 25 per cent of their deposits. As New York is the market *par excellence* for securities, the New York banks are the first to be put in a position where it is difficult for them to add to their loans. The amount of surplus reserves and of the surplus of deposits over loans are the best indices to their condition. When surplus reserves are high, call money is

apt to be easy; when low or minus, call money is very likely to be high. The daily settlements and clearances on the Exchange, call loans, valuation of stocks on the basis of current exchange quotations, and the necessity for the banks to keep a 25 per cent reserve—all act together to bring about the peculiar conditions under which a stock boom and a stock collapse occur. When a drastic financial situation rights itself without the infliction of grave commercial losses, the business contraction will be much less severe than might have been looked for from the decline in stock prices. This was the case in 1904 following the 1903 collapse in the stock market.

It is thus evident, with our present bank methods in New York of investing the bulk of bank commitments in loans on stock, rather than in commercial discounts, as in Europe, that our great overdone bull and bear markets are to be expected recurrently, unless an elimination is made of the practice of extending bank credits merely on the basis of exchange quotations instead of lending on the basis of conservative appraisement, as with all other sorts of security. A change of this latter sort would, in the end, mean that brokerage houses would have to demand larger margins from customers than now, to cover part of the sums now advanced on the shares by the banks.

As conditions now stand, inflation of financial loans enhances stock prices; deflation reduces them. By an extension of over-liberal credit on stock collateral, the banks bring about a boom; by its withdrawal, they necessitate a collapse.

	Highest call loans on Exchange.	Highest time loans.	Range on choice double name paper 60 to 90 days.
1900			
Jan.	12	6	4 to 6
Feb.	3	5	4 to 4½
Mar.	7	5	4½ to 5
Apr.	5	4	4 to 4½
May	3	4	3½ to 4
June	2	4½	3½ to 4
July	2	4½	3¾ to 4½
Aug.	2	4½	4 to 4½
Sept.	2	4½	4 to 5
Oct.	6	5	5 to 5½
Nov.	25	5	4½ to 5
Dec.	6½	5	4¼ to 5
1901			
Jan.	6	4½	3½ to 5
Feb.	2½	4	3½ to 4
Mar.	3	4	3½ to 4
Apr.	7	4½	3½ to 4
May	75	5	3¾ to 4
June	15	4	3½ to 4½
July	25	5	4 to 4½
Aug.	4	5	4½
Sept.	10	5½	4¾ to 5
Oct.	4½	5	4½ to 4¾
Nov.	5	5	4½ to 3
Dec.	12	5½	5
1902			
Jan.	15	5½	4 to 5
Feb.	3	4½	4
Mar.	5	4¾	4 to 5
Apr.	7	4¾	4 to 5

## STOCK PRICES

	Highest call loans on Exchange.	Highest time loans.	Range on choice double name paper 60 to 90 days.
1902.			
May	25	5	4 $\frac{1}{4}$ to 4 $\frac{3}{4}$
June	5	5	4 to 4 $\frac{3}{4}$
July	7	5	4 $\frac{1}{2}$ to 5
Aug.	5 $\frac{1}{2}$	5 $\frac{1}{2}$	4 $\frac{1}{2}$ to 5
Sept.	25	7	*5 to 6
Oct.	35	7	*5 $\frac{1}{2}$ to 6
Nov.	7	6	5 $\frac{1}{2}$ to 6
Dec.	13	6	*6
1903			
Jan.	15	6	4 $\frac{3}{4}$ to 6
Feb.	4	5	4 $\frac{3}{4}$ to 5 $\frac{1}{4}$
Mar.	8	6	5 $\frac{1}{2}$ to 6 $\frac{1}{2}$
Apr.	15	5 $\frac{3}{4}$	5 to 5 $\frac{1}{2}$
May	3	4 $\frac{3}{4}$	4 $\frac{1}{2}$ to 5
June	4 $\frac{1}{2}$	5 $\frac{1}{2}$	5 to 5 $\frac{1}{2}$
July	10	3 $\frac{1}{2}$ to 6	5 to 5 $\frac{3}{4}$
Aug.	3 $\frac{1}{2}$	6	5 $\frac{3}{4}$ to 6
Sept.	3	6	6
Oct.	5	5 $\frac{1}{4}$	5 $\frac{1}{2}$ to 6
Nov.	9	6	5 $\frac{3}{4}$ to 6
Dec.	9	6	5 $\frac{1}{2}$ to 6
1904			
Jan.	6	5	4 $\frac{1}{2}$ to 5 $\frac{1}{4}$
Feb.	2	4 $\frac{1}{2}$	4 $\frac{1}{2}$ to 5
Mar.	2	4 $\frac{1}{2}$	4 $\frac{1}{2}$ to 5
Apr.	1 $\frac{3}{4}$	4	3 $\frac{3}{4}$ to 4 $\frac{1}{2}$
May	2 $\frac{1}{4}$	4 $\frac{1}{2}$	3 $\frac{3}{4}$ to 4 $\frac{1}{4}$
June	1 $\frac{1}{2}$	3 $\frac{3}{4}$	3 $\frac{1}{2}$ to 4 $\frac{1}{4}$
July	1 $\frac{1}{2}$	3 $\frac{3}{4}$	3 $\frac{1}{2}$ to 3 $\frac{3}{4}$
Aug.	1 $\frac{1}{4}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$ to 4

	Highest call loans on Exchange.	Highest time loans.	Range on choice double name paper 60 to 90 days.
<b>1904</b>			
Sept.	2½	4	3¾ to 4¾
Oct.	2½	4	4 to 4¾
Nov.	4	4	3¾ to 4½
Dec.	5	4	4 to 4½
<b>1905</b>			
Jan.	3½	3½	4¾ to 6
Feb.	3	3½	4¾ to 5¼
Mar.	4	4	5½ to 6
Apr.	7	4	5 to 5½
May	3¼	4	4½ to 5
June	6	4	5 to 5½
July	3½	4¼	5 to 5¾
Aug.	3	4	5¾ to 6
Sept.	7	4½	6
Oct.	8	4¾	5½ to 6
Nov.	25	6	5¾ to 6
Dec.	125	6	5½ to 6
<b>1906</b>			
Jan.	60	8½	4¾ to 5½
Feb.	8	5½	4½ to 5
Mar.	9	5½	5 to 5½
Apr.	30	6	4¾ to 5¾
May	12	5½	4¾ to 6
June	6	5¾	5 to 5½
July	8	6	5 to 5¾
Aug.	12	6	5½ to 7
Sept.	40	7½	6 to 7
Oct.	9	6½	6 to 7
Nov.	27	6½	6 to 6½
Dec.	36	7	6 to 6½

	Highest call loans on Exchange.	Highest time loans.	Range on choice double name paper 60 to 90 days.
1907.			
Jan.	45	7	5 $\frac{3}{4}$ to 6 $\frac{1}{2}$
Feb.	6	5 $\frac{1}{2}$	5 $\frac{3}{4}$ to 6 $\frac{1}{4}$
Mar.	25	8	6 $\frac{1}{2}$
Apr.	4 $\frac{1}{2}$	5	5 $\frac{1}{2}$ to 6
May	4	4 $\frac{3}{4}$	5 $\frac{1}{2}$ to 6
June	12	6	5 $\frac{1}{2}$ to 6
July	16	6	5 $\frac{1}{2}$ to 6
Aug.	6	7	6 to 6 $\frac{1}{2}$
Sept.	6 $\frac{1}{2}$	6	6 $\frac{1}{2}$ to 7
Oct.	125	7	*7 to 7 $\frac{1}{2}$
Nov.	75	16	*7 to 8
Dec.	25	18	†8

\*Mostly nominal.

†Practically no business.

1908.

Jan.	20	7	5 $\frac{1}{2}$ to 7 $\frac{1}{2}$
Feb.	2 $\frac{1}{4}$	5 $\frac{1}{4}$	4 $\frac{1}{2}$ to 5 $\frac{1}{2}$
Mar.	2 $\frac{1}{4}$	5	5 $\frac{1}{2}$ to 6
Apr.	2	5	4 to 5 $\frac{1}{4}$
May	2	4 $\frac{3}{4}$	3 $\frac{1}{2}$ to 4
June	1 $\frac{3}{4}$	4 $\frac{1}{4}$	3 $\frac{1}{2}$ to 3 $\frac{3}{4}$
July	1 $\frac{3}{4}$	4	3 $\frac{1}{2}$ to 4
Aug.	1 $\frac{1}{4}$	4	3 to 4
Sept.	2 $\frac{1}{2}$	3 $\frac{3}{4}$	3 $\frac{1}{2}$ to 4
Oct.	2	4	4 to 4 $\frac{1}{2}$
Nov.	3	4	3 $\frac{1}{2}$ to 4 $\frac{1}{2}$
Dec.	4 $\frac{1}{2}$	4	3 $\frac{1}{2}$ to 4

1909.

Jan.	3	3 $\frac{1}{2}$	3 $\frac{1}{4}$ to 4
Feb.	3	3 $\frac{1}{2}$	3 $\frac{1}{2}$ to 3 $\frac{3}{4}$

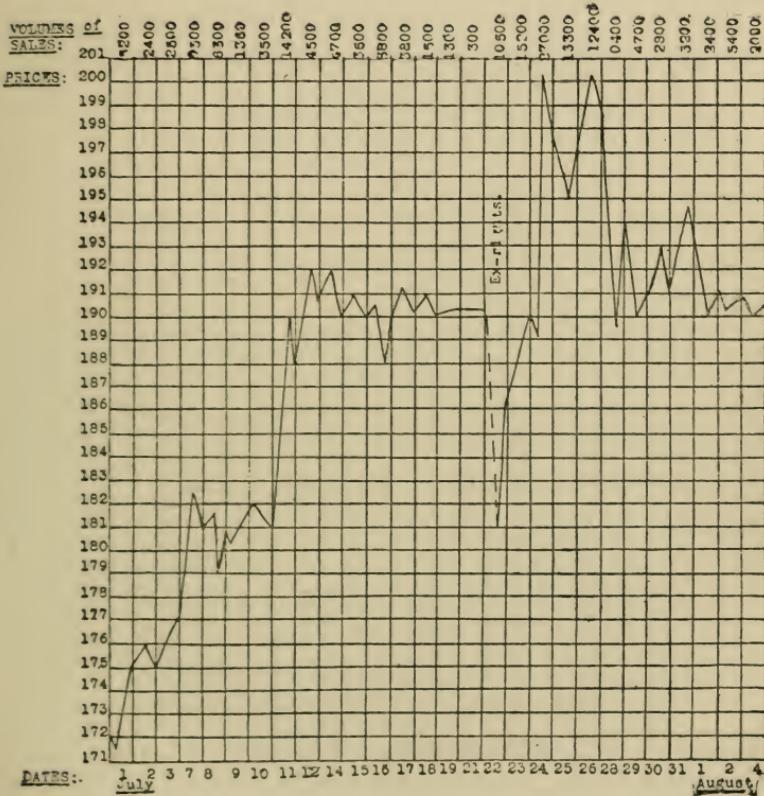
	Highest call loans on Exchange	Highest time loans.	Range on choice double name paper 60 to 90 days.
1909.			
Mar.	2½	3½	3¼ to 3½
Apr.	2½	3½	3 to 3¾
May	2½	3¾	3 to 3¾
June	2¾	3¾	3 to 3½
July	2	3¾	3 to 3½
Aug.	2½	4	4 to 4½
Sept.	3	5	3¾ to 4½
Oct.	6	5	4½ to 5½
Nov.	6	5¼	5 to 5½
Dec.	7	5	4¾ to 5¼
1910.			
Jan.	14	4¾	4½ to 5
Feb.	3	4¼	4 to 4¾
Mar.	3¼	4½	4 to 5
Apr.	7	5	4¼ to 5
May	6	5	4½ to 5
June	3½	4¾	4½ to 5
July	3	5¼	5 to 5¾
Aug.	2	5	5 to 5¾
Sept.	3	5	5¾ to 6
Oct.	4	5	5¼ to 6
Nov.	4¾	5¼	4¾ to 6
Dec.	7	4¼	4 to 5¼

## VI.

### **The Floating Supply**

The floating supply of a stock may be best defined as that part of the outstanding capitalization which is held for a speculative advance. Its amount in the market varies with each change in quotations; some stock not for sale at the current price may come out a point or two above, or be forced out, from lack of margin, a point or two below, while still other shares will require a fluctuation of many points before they are for sale. In general, the floating supply may be taken to be all stock outstanding except that held for investment purposes, whether it be dividend paying or whether dividends are merely hoped for, and except that further portion of stock held for purposes of control. As here defined, probably most of the floating supply of listed stocks is carried on a margin with brokers or is pledged at banks, though some of it is held outright; on the other hand, of the fixed supply—that held for investment or control—a portion also is to be considered as always in pledge.

In some stocks the floating supply is very small; in others it comprises all the shares except the few held for purposes of control. Figures at all exact on this subject are, as a rule, known only to the general officers and directors of a road and those whom they may choose to take



RISE OF CHICAGO, ROCK ISLAND & PACIFIC IN 1902.

into their confidence. Not that they are always known to them, for sometimes stock, even for investment, changes hands without transfer on the company's books. Nevertheless, while exact figures on this matter are out of the question, something approximate may be sometimes guessed at. Thus, from the large number of investors in Standard Oil stock it may be inferred that its fixed capitalization is large and its floating supply relatively very small, while from the vast dealings in such stocks as Reading in recent times and St. Paul some years ago, it might be conjectured that a very large amount of these stocks was afloat in the Street.

It is often said that a stock closely held is easy to mark up; and, taken literally, the statement is true, for if there are few outsiders' shares to come to the market for sale, it is obvious that it must be easy for the manipulators to mark up the price of such as they possess by the simple expedient of a few matched orders. But in practice the facts do not work out this way. It will be found that a stock is rarely manipulated upwards unless its floating supply is quite large in amount, whether or not it be also relatively large to the amount of the fixed supply. True, a stock with a small, closely held floating supply is easy to mark up. But then to whose advantage is it? On the hypothesis, those responsible for the manipulation can accumulate at the start little more of the stock than they already own, so that their object, if the stock have no investment value, is simply to dispose of their own holdings. But if the number of shares of the stock is small this is

hard to do at the top prices; the same certificates, to make anything like a market, have to be sold over and over again; room traders and brokers' customers are alike shy of the stock; violent fluctuations occur on any attempt to liquidate by an outsider who has purchased a certain amount, and not infrequently the whole boom goes to utter collapse at the top through the efforts of some green insider to get the public to relieve him of his holdings.

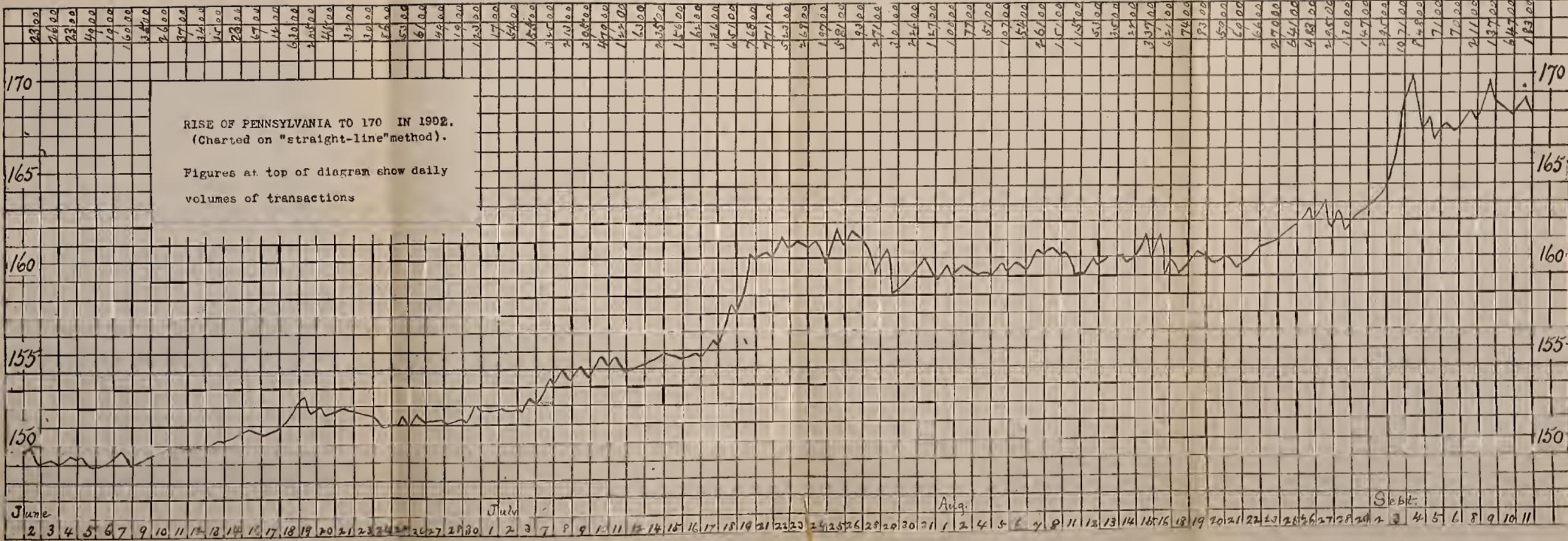
On the other hand, a stock whose floating supply is small, because the shares have a high investment value, presents another situation, but one also which tends to prevent manipulation of a successful sort. An attempt to bull a stock of this sort results in one of two things. If the stock is very high grade the manipulators may mark up the price without reaction of large moment, as was done some years since in Lackawanna; here the price touched at once the figure which, had the stock been left to the ordinary demand of investors, it would have reached anyway, though no doubt much later on. But in this situation what the manipulators have for sale is too scanty in amount for them to make much out of it, nor can they hope to interest the public to any extent into buying a high-grade investment stock at the very high price it has reached. In the second case, mentioned above, if the stock has simply a very large number of investors who own a large percentage of its shares, then it will be hard in this case, also, for the manipulators to accumulate a good-sized line to dispose of except at prices higher than they want to give; besides this, as the bulling is apt to bring stock

from unexpected sources, both investment and speculative, on the market, the pool may have to buy at the prices to which they have put the shares, more than they feel like taking care of. The first thing in all manipulation for the rise is to clean up the floating supply or to see that it is tied up so as not to come prematurely to market; but in the case of a stock like Pennsylvania this is impossible. Thus a stock with a large fixed supply held by many investors offers little attraction to a syndicate which thinks of manipulating it. For these reasons Pennsylvania stock, the last and slowest to go down in a panic, is one of the hardest to put up rapidly in a bull market. (See chart.)

Shares closely held may be kept at prices which seem hardly justified by the conditions; provided that the holders generally are inclined, as they sometimes are when few in number, to acquiesce in the valuation and not to sell. This explains the prices at present of Lackawanna and of Lake Shore. Something of the same sort in the past has been the case with the stocks of the Chicago & Northwestern, the Great Northern, the Northern Pacific and the New York, New Haven and Hartford among railroads and the General Electric among industrials. New York, New Haven and Hartford has paid 8 per cent yearly for many years past. In 1902 it rose to 255 in April; since then it has fallen steadily and now sells at about 140. Its capitalization has increased from 80 millions in 1900 to over 300 millions by 1910. So, Northwestern in 1902 sold at 270, though then paying 7 per cent as now. There has been an increase of 80 millions in its securities. Seven per cent









Great Northern in February, 1906, rose to 348 and, later on, in September, to 341. Seven per cent Northern Pacific in the same year rose to 232½. General Electric, then as now, an 8 per cent stock, rose in 1902 to 334. None of these extreme rises would have been possible save through banking aid extended (as described in Chapter V) to the interests bulling these stocks.

St. Paul used to be one of the easiest of all stocks to manipulate. The investment holdings of it were not well distributed, but confined to a few wealthy interests whose investment stock did not come readily to market. Moreover, the great owners were, also, to a large extent those interested in the "rigging." The same men or their lieutenants, who owned great blocks of the stock, would accumulate a large line of that floating in the Street; this was advanced rapidly in price, and then it and as much of the original holdings as desired were disposed of to outsiders whose hopes had been raised to a high pitch for all sorts of melons to come. As this process of accumulation and distribution of St. Paul was done time and again, a certain amount of the stock each time passed into bona fide investment hands and was taken off the market. Less and less of the stock was left floating, and with the development of the road the shares gradually lost much of their market importance, which is now held by Union Pacific and Reading. In general, it may be stated that a good corporation stock is likely to become increasingly difficult to manipulate as time goes on, because the floating supply, which furnishes the profits to pools, becomes

smaller and smaller and because the investment supply has become very large (as in the case of Pennsylvania). As a country increases in wealth, the stocks and bonds of established corporations tend to belong entirely to the investing classes and to be kept out of the speculative market.

While at the top of an advance the floating supply in the Street becomes small, because distributed among the public, which usually retain some of it permanently if the stock be of real value, at the bottom of the market, on the other hand, and at various intermediate points, the shares held by outsiders were partly acquired by them at the top in the hopes of a farther rise. The owners of such shares, which are usually carried on margin, gradually part with their high-priced stock in disgust, as quotations pursue their downward course. But stock of this sort does not, as a rule, lodge at once in the hands of those strong enough to hold it till another advance is engineered. Such shares are for the time being more likely to be absorbed by floor traders on the exchange, by other speculators or by investors. When the bottom has at length been reached the accumulative process may begin again, either then or later.

Manipulated stocks like Reading and Union Pacific at present and St. Paul in the past move over a much wider range than those which are not or cannot be taken in hand by speculative pools. The former go much higher in a bull market and much lower in a bear market than the latter. Thus the difference between the low prices of

1907 and the high prices of 1908 was 85 points for Union Pacific, 72 for Reading, 60 for Southern Pacific and 59 for St. Paul (this stock being still speculative in its movements); while for Pennsylvania the difference was  $28\frac{1}{2}$  points and for New York Central 27. Of course, the volume of sales in a manipulated stock greatly exceeds that in stocks moving more normally; in 1908 the sales of Union Pacific were 21,100,000 shares, of Reading 35,300,000, and of Southern Pacific 8,800,000, while of Pennsylvania they were but 4,100,000 and of New York Central 1,800,000.

Thus it would seem that to be a speculative favorite a stock should have a large floating supply and should be held by but few investors. This explains the difference in the movements of Reading and Union Pacific on the one hand and of New York Central and Pennsylvania on the other, for it may be put down as sure that these two well-known stocks would be natural market leaders if it were possible to make them so. It may be thought strange that Reading is not largely held by investors, but as a matter of fact this road has never recovered the prestige it once had with the small investors; especially in Pennsylvania, where the stock would find a natural lodg-ing place, are its past failures held in memory.

It is worth noticing that in an advancing market a conservative stock like Pennsylvania is practically certain to show a small gain for the buyer who wants but little risk. For speculation on a small margin it is hard to pick a much surer stock than one of this character, unless, in-

deed, a very low priced one is chosen, where, however, the danger of adverse fluctuations is almost as great, counting by points and is greater, counting by percentages. High grade, slow moving stocks have also the advantage that they are rarely influenced by special causes and that when they are so, as by a new stock issue, the matter is soon public. The man with \$5,000 with which to speculate who buys Pennsylvania on a ten point margin in the hopes of a five point rise is wiser than he who buys Union Pacific on the same size margin looking for a ten or fifteen point profit. The latter may, to be sure, make largely, but he takes unwise risks; the former, if careful at all, can hardly, at the worst, lose more than a point or two and stands a good chance to make a profit.

Dealing, therefore, in a stock of large capitalization, held largely by investors, and with a floating supply small as compared with that of other stocks of equal or nearly equal capitalization and prestige, affords one of the safest opportunities for the man whose margin is small, measured either by what is in his broker's hands or by his whole available capital. For these reasons, Pennsylvania, and a very few other stocks offer peculiar advantages to the small speculator of conservative ways of thinking.

## VII.

### **Manipulation**

As a rule, speculative buying when successful involves awaiting a favorable opportunity to make purchases cheap and speculative selling awaiting a time to sell when market prices are high. When, however, a speculator, or a coterie of speculators, not content with such waiting methods, endeavor to bring about cheap prices for stock they wish to buy and high prices for stock they wish to sell, we have what is called "manipulation" in America, in England, "rigging the market." The popular impression as to the immense importance which proceedings to these ends possess is apt to be exaggerated. A speculative purchase may be the same in amount whether made by many speculators personally unknown to one another, but who are, each of them, on the right side of the market, or whether made by all in concert and knowingly. The traders who are right in unison are likely to be right separately. The momentum of manipulative buying in a stock may be resolved into the separate upward thrusts which otherwise might have been made separately, and which, in any event, would probably have been made in some securities with the same general upward effect on the market as a whole. The importance of manipulation lies in the selection of a stock for accumula-

tion at low figures and in its distribution at higher figures and in the fitting times to make such purchases and sales. It also depends on the general methods by which the impression is given the public that they should buy when the manipulators wish to sell and sell when they wish to buy.

Speculative tactics of the first sort usually have their expression through a pool in a stock, where a number of separate traders or, occasionally, firms and financial interests, agree to be responsible for such a number of shares of the security in question, the prices at which and the time when the shares are to be purchased and sold being generally left to the discretion of one or of a few members of the pool supposed to be versed in market matters. Sometimes the stock has only to be quietly bought up, the promoters of the deal taking all offerings of the shares but not bidding for any stock till it becomes evident that at the particular range of quotations obtaining, no more of the shares are for sale. Bids at slowly rising prices are then put in till the requisite number of shares are obtained or until it is evident that no more can be accumulated at sufficiently low prices. Sometimes, however, the shares have not to be bought in the market at all. They may be already the property of members of the pool given them at the organization of the corporation or for services, later on, of some sort or another. Or they may simply be shares which have been long in the possession of the owners without having found the ready market which it is now desired to create.

In other cases, to obtain a large holding of shares it

may be necessary to make the present holders sell. The stock as it stands may be too high priced to be worth the expense of accumulating. To reduce the price of a stock for this purpose, a judicious amount of short selling appears, and if the manipulators have control of the company, its dividends may be cut, hands laid off or even the plant shut down, till the public, alarmed and disgusted with the course of things, throws its shares on the market for what they will bring.

But, however procured, the distribution of a line of stock means exciting interest in the public in connection with that stock. The methods of doing this are manifold. In the end, however diversified, they amount to creating a market appearance of activity and strength in the stock, which in the end will lead the public to buy heavily in the hope of still higher prices. It is worth noticing that neither strength nor activity by itself will lead the public into the market; the two must be combined. This is a fact which has not infrequently been forgotten by would-be manipulators with the laudable but impracticable intention of husbanding their resources and making no more fictitious purchases and sales than seem necessary to keep the stock in public view. The attempt, some years ago, to arouse a market for the shares of the American Ice Securities Company failed for this reason. The advance in the stock price was steady, continued and without any dangerous reactions fitted to scare the public off. But the trading was too scanty and the effect given was exactly what should have been most concealed, viz.,

that the shares were the plaything of a very small coterie who could do with their price whatever was wanted. The stock which touched  $97\frac{1}{8}$  in December, 1906, fell to  $8\frac{1}{8}$  in October the next year, and has hovered in the twenties and thirties most of the time since then.

During the upward course of a stock, dividends, if possible, may be increased, rosy reports made of earnings and in every possible way the public incited to buy the quickly booming property. When a large and broad market is made for the stock, when the public is coming more and more into the security with buying orders, enthusiastic about the very high prices soon to exist—at such time the members of the pool sell.

Speculative pools in important stocks arise only when the general market itself has an upward trend. This is also true to a very great extent of pools in smaller stocks, such exceptions to it as have occurred having done so chiefly through the ill-timed judgment of their sponsors. To endeavor to buy cheaply in a raging bull market is impossible; not less so is it to sell dear amid generally depressed prices of other securities. The whole market moves very much as a unit; the differences between various stocks being not that they move at the same time in opposite directions, but that one moves faster than another in the same direction. Pools may be regarded not so much as causes of this general market movement as specialized expressions of the character of its speculative activity. If there were no pools, the present members would still exert their financial strength in the market,

though, it may be, possibly in other directions. A pool simply concentrates financial power into one channel and uses it for a definite, fixed purpose with less waste than would be incurred through the disjointed efforts of many individuals.

Manipulation, in the sense of the conscious direction, by concerted holders, of capital exists at almost all times in the market to a greater or less extent. But it exists successfully only in so far as the manipulators correctly foresee the general tendencies of the future. Interest for any length of time cannot be excited in a stock which has no real future before it. The facts leak out. Add to this, that with great corporations their conditions nowadays can be concealed only up to a certain point, though it must be confessed, from certain events in the last few years, that this concealment can take place to an extent which one would be inclined to think impossible without knowledge of the actual facts.

In a successful manipulation, it is not exactly true that the public are deceived. To a large extent, they deceive themselves, with hopes of vast dividends, melons, and so on; though, no doubt, the sponsors of a market movement count on this very self-deception occurring. The public think the shares will have very much higher prices and would not buy except as laboring under this delusion. Even when the public happen to buy at prices fair from an investment standpoint or as representing the equity of the shares in the total gross valuation of the concern, the manipulators accumulated the shares at prices very much lower.

In the case of certain stocks the public almost year after year buy at the high prices what the same interests or their successors buy at lower figures. The stock of the American Sugar Refining Company used to go through upward and downward movements with extreme regularity, though with much wider swings one time than another. For years past Brooklyn Rapid Transit has performed similar evolutions; at times the distribution was in the year following the accumulation. There are very few stocks of which a chart from 1899 to 1909 presents such an odd appearance to those conversant with market movements. The object of the manipulators seems to have been, to obtain at least 15 to 20 points profit each year. The whole gist of the matter is that manipulators take advantage of the tendency on the part of the public to buy on the basis of present conditions, that is, not to speculate, "look ahead," at all.

Manipulative activity explains the tendency in a rising market for stocks to go up one or two rapidly at a time, instead of all together. The chief speculative coteries are at the moment dominant in the stocks whose prices are quickly advancing. Very frequently, a group of the same traders, particularly of those very wealthy coteries known popularly as the "Standard Oil crowd," the "Union Pacific following," the "Morgan interests," and so on, will, with the aid of the banks as described in Chapter V, put up the price of one stock after another, when they expect that the public will shortly become interested in the market. In these cases, it is the higher grade stocks which move first.

In the case of the activity of these great interests, manipulative tactics sometimes take on a different form. The principle of allowing the public to deceive themselves is applied in a more subtle form. For example: From the beginning till now, affairs of the United States Steel Corporation have been conducted in a manner above board; yet, the public bought the stocks at the outset, in 1901, with the idea that dividends would be paid straight on. Few experienced persons in the steel business believed this to be possible in connection with the common shares, but, likewise, no one of importance in the business, proclaimed this belief. On the contrary, the "insiders" sold their stock at the high prices made possible by the belief, and, afterwards, when the price of both sorts of shares had fallen immensely, bought them back for a song and waited serenely for the trade revival, then already on the way. In other cases, the manipulation off the Exchange has been more directly deceptive. Of very few important shares is this truer than of those of the Amalgamated Copper Company in 1901 and 1902.

It might be enquired what would be the result if the public became practically familiar with the situation in Wall Street. The only answer can be that the processes of accumulation and distribution would be confined to a much smaller range of prices and that the quotations for stocks would, consequently, not fluctuate so far as they now do from the central figure which may be regarded as giving a fair idea of their value. But it does not appear that such familiarity will obtain. Haphazard speculators

are, many of them, quite capable of understanding the facts of the situation; but they fail to identify the phases of such situation when, afterwards, it presents itself to them anew.

Manipulation in stocks which are not traded in on the great exchanges differs necessarily in some important features from such as obtains in the case of listed securities. In the former instance, the manipulators can rarely obtain much assistance from banks; they have, consequently, to bear the brunt of the financing themselves. Manipulation off the exchanges, therefore, is almost always confined to stocks of rather small capitalizations, unless, of course, the capitalization be a merely nominal one. As the pool can obtain nothing like the percentage of profit on its holdings for the same size rise as it would have obtained had the burden been largely borne by the banks (which would have allowed the purchase of many more shares), it follows that speculative coteries in such shares nearly always endeavor to put them to extreme price heights, to make, in this way, a good sized profit. As they can carry only few shares, they try to get the biggest sort of a gain on each. In such cases it should be noted there are no marginal accounts to be quickly disturbed. Consequently, as long as a general fright does not occur, markets of this sort are apt to rise to heights unheard of in similar situations on the exchange. The New York Curb has witnessed some sensational flights in the prices of stocks which had little or no collateral value with banks, and which pools and public alike had, there-

fore, to carry outright or almost so. In 1906, the price of the Nipissing shares was run up from par at \$5 to about \$34—an increase of nearly 600%. Flights almost equally as wild were performed about the same time by other Cobalt shares. Lawson's campaigns in some mining stocks are also worth notice here. In the year just mentioned the price of Trinity (\$25 par) shot up from \$10 to \$40 in a few weeks—a rise of about 300%. In this rise it should be noted that the well-known speculator instructed his followers to buy for cash only, and that, as a matter of fact, so great was the suspicion of Mr. Lawson in brokerage and banking circles in New York as well as elsewhere, that it was almost impossible, in many places totally so, to buy any other way.

It thus appears that the differences between marginal and non-marginal markets and between manipulation in the two depend on the way the floating supply of shares is carried in each case.

## VIII.

### **Rising and Falling Markets**

It was pointed out, years ago, by the late Charles H. Dow, that market movements divide themselves into three classes as regards length and duration of upward and downward swings; there are, first, the great swings, such as those from September, 1900, to August, 1902, or from 1904 to 1906, which rarely cover a period of less than a year or two and are sometimes longer. Then, there are the shorter swings of a month, two, three or more months, such as may be seen in plenty between May, 1901, and August, 1902, in the generally rising bull market. Finally, there are the minor variations from day to day, which form part of the secondary swings, just referred to, in the same manner as they form part of the great primary swings. No doubt, smaller fluctuations, or swings of a few hours or a day's movement could be fitted into the tertiary swings as they are into the secondary. The whole appearance of the market from year to year might be compared to the waves of the ocean where the great waves are crossed by smaller ones which, again, are swept by lesser ones and so on down to minute and scarcely perceptible wavelets. The primary swings mean movements in the market in one direction of fifteen, twenty, thirty or more points, the secondary of four, six,

eight or more points. The day-to-day variations within these secondary swings, are of a point to a few points—very often mere reactions from the course of the secondary swings which they follow. Of course, it should be understood that large secondary swings may occur within a day or two or even within a few hours, as witness the two hours' panic on May 9, 1901.

It is worth notice that the market swings are now much more extended than they were years ago and that the great swings in the eighties and nineties are barely the size of our secondary swings. This is because the general price level of stocks was then much lower. There were then no great railroad stocks selling over \$200 a share and very few selling at par, while the great majority were much below.

In considering the peculiarities of bull and bear markets, a careful distinction should be made between an upward secondary swing which is a rally in a bear market (as in April, 1903 or in March and April, 1907,) and a great, upward, primary swing, such as that which ran from the end of 1907 to August, 1909. At the end of a secondary swing in the same direction as, and a part of, its primary swing, a reaction of about one-half to three-quarters of its extent usually occurs in the opposite direction. For examples see (on the charts in Chapter IX) the rallies in March and in March-April, 1907, that in June and that in August of the same year; in an advancing market, that of October, 1906, and September, 1905, May-June, 1908, and August-September of the same

year. It will be observed that such reactions are sometimes broken by short tertiary swings within themselves in the direction of the primary movement. It should, further, be observed that a reaction at the top of a movement may pass into the beginning of a swing in the opposite direction, whether such swing be of primary or of secondary duration. Thus, in September, 1902, and in October, 1906, the recession passed into the beginning of the great downward swings of 1903 and 1907, respectively. The forces dominating the market have changed in character. It was noticed in a previous chapter that this reversal of the character of the market was usually preceded by dullness after a falling market, but accompanied by activity in a rising market. In other words, bear markets may follow at once on the heels of a culmination of a bull movement, but this is not so of a bull market following on a bear.

To understand why these differences should subsist between bull and bear markets and to get a better understanding of what is, after all, the greatest difference from the speculator's standpoint, it will be necessary to examine somewhat closely the function of short selling in the market.

Short selling represents the views of the conservative interests in the market. It is a brake on undue inflation, the check which halts a too rapid speculative rise. Commission house customers, individual financiers and great financial interests are relatively seldom short sellers; the customer because he lacks courage and knowledge and

the large financial interests because speculation is but an adjunct to the flotation and distribution of the shares of their enterprises, and, consequently, their primary aim is to enhance, not to depress prices. Of course, great financiers have at times allowed or encouraged a depression, whether long or short, with the object, or, at least, the intention, of taking back shares at lower prices, themselves.

Nor, save sometimes at the end of a long decline, are brokers given to encouraging short selling by their clients. To encourage it, is to favor pessimism, and experience has shown that the chief result of a firm's encouraging pessimistic feeling is simply to keep its own customers from trading at all.

The most obvious thing connected with short selling is the small number of persons engaged in it at any one time whatever, compared with the number of those who are bulls at nearly any time. The chronic short sellers are, in fact, limited to those members of the exchange who are room traders and to a certain, probably small, proportion of the professional and semi-professional traders.

In a steady market, therefore; in an advancing market; and, almost always, even in a declining market (unless the decline has long progressed), those long of stocks greatly outnumber (with much larger aggregate of commitments in shares) those short, the former class comprising, as it does, not only all speculators for the rise but the great army of investors. Hence a slump is nearly

always more necessitated by conditions, more independent, that is, of the wishes of the great majority of buyers and sellers, than is a bulge. In a bulge nearly everyone interested is glad to see prices go up; in a slump, save, possibly, sometimes in an active long-continued bear market—few like to see prices go down. In a day's slump, all that is necessary for prices to decline, is that the holders of stocks should do nothing, and they will see the prices of their shares go down. Soon marginal holders begin to let go of their constantly weakening accounts and all they can do now is what they are forced to do—liquidate. Hence the reason that an active rising market may be the immediate precursor of a bear movement, but that a bull movement is preceded, not by activity with weakness, but dullness: the bear market is forced; the bull market is brought about by intentional participation, and, after a great fall neither financial circumstances nor sentiments are apt to permit of an instant reversal of the weight of the trading.

Thus, at the top of an upward movement, whether it be an advance of a few days or of months, whether it be great or small, there are two classes—the bears and the profit takers—to retard the continuance of the advance. But in a declining market the profit takers—here, the successful short sellers—are, indeed, there, though few in number compared with the profit takers on a rise, because the short seller is rarer than the buyer for the rise; but there is no class to correspond to the bears in an advancing market, no class, in other words, to endeavor sys-

tematically in a falling market to stop the fall and reverse its course as the bears in an advancing market endeavor to stop the advance and reverse the course of the bull movement. Once again, to the same point is the fact that the average room customer, who is a bull, usually takes small profits when he takes them at all. Usually he fidgets in-and-out of the market. But the professional short seller, when not a scalper, stays with the market (as of course, does the "wise" bull in his proper time) and lets his profits reasonably run.

In a bull market the public repeat and re-repeat their commitments on the long side, but in a bear market after once closing out they do not, as a general rule, re-enter as buyers for some time thereafter. The purchases by the public in a bull market mark the beginning of a transaction which has to be closed by a sale unless the stock is taken out of the market, but the sales by the public in a bear market mean the end not only of that particular account, but usually of any account for some time to come. There are no large public purchases in a bear market to give it repeated upward thrusts.

To put the whole matter in a nutshell, there is always a large reserve of prospective selling in a bull market which, as higher and higher prices are reached, tends to retard the speed of the movement; but in a bear market the reserve of buying strength is much smaller in proportion to the extent of the price movement.

From the foregoing we may draw a preliminary con-

clusion that prices go up slower in a bull market than they go down in a bear market.

If we take the great bear market of 1907 we shall find that railway stocks as measured by the average prices of twenty rails, fell 56 points net between December 11, 1906, and November 21, 1907—a total of 345 days, including Sundays and holidays. On the other hand, the bull market of 1908 and 1909, counting from February 13, 1908, to August 17, 1909, rose 47 points net, as measured by these averages, in 551 days. Thus, the twenty rails rose on an average .085 points a day in the bull market and fell on an average .160 points a day in the bear market—or about twice as rapidly.

Or, if omitting swings of less than two points in either direction, we count up bull days and bear days in both markets, we find that in the bear market of 1907 there were 213 days of fall, totaling 92 points, and 132 days of rise, totaling 51 points. (The difference between these figures is not the true net of 56 points on account of the omission of swings of less than two points.) On the other hand, in the bull market of 1908 and 1909 there were 432 days of rise, totaling 90 points, and 119 days of fall, totaling 42 points. Thus, as before, we arrive at about the same result, namely, that a rise in a bull market takes twice as long as a fall of an equal number of points in a bear market; or the average daily rise in a bull market is only half the average daily fall in a bear market.

Daily slumps in a declining market are not the same

as bulges in an advancing market. Examine the day-to-day prices of some active stock during the bull movement of 1900 to 1901 or the advance from February, 1908. With these courses of prices, compare those in 1903 and 1907. In the bull markets, it will be found that the rises in price (the upward secondary movements), take up as a rule a much longer time for the same number of points advance than do the declines in the bear markets. That, indeed, in the bear markets, the decline goes on not so much by a continuous retrogression as by a series of acute downward fits and starts. Both bull and bear markets may be marked by smart reactions; but, here, too, the rally in the bear market, like its rapid precedent fall, is relatively quicker in the time of its occurrence than is the recession in the bull market after the precedent rise. When the downward movement in a bear market abates, prices, after the rally, fluctuate about the same points till a recurrence of selling pressure induces another break.

Yet even the foregoing figures do not fully show the great difference in rapidity of price movement in bull and bear markets.

The upward progressions in prices in 1900 to 1901 and in 1908 to 1909 lasted for weeks and months continuously with a few reactions also of considerable duration but moderate in their extent. But, on the contrary, in 1903 and in 1907, the great downward swings which gave the character to the whole bear movement of each year, took place in very few days. The breaks on a few days

in January, 1907, on March 14, March 25, August 7 and 8, October 14 to 30 (but not on every day of this interval) make up nearly the whole bear market of 1907. There were declines at other times and a pessimistic feeling throughout the year (to say nothing of the facts outside the Exchange) which indicated that the downward forces were still in the ascendancy, but it was to these days that the real decline was very largely confined. It is worth adding that, as is evident from the above, a great volume of sales on any day is far more effective in a bear than in a bull market. Great record days on the Exchange are much more frequent in bull than in bear markets and much less important. It is worth adding, as a corollary to the above paragraphs, that a very great general fall may occur at once on the top of a great general rise, as in May, 1901, but that an advance so huge in the number of points could hardly, even as a rally, occur in a bear market; for, if it did, it would mean that the entire market was practically cornered.

If the rises in 1900 to 1901, in 1904 and in 1908 be considered, it will be seen that in all three instances prices at the beginning, advanced very continuously and generally speaking, much more rapidly than later on. This indicates the willingness with which banking institutions financed the rise. But, from May, 1901 to August, 1902, from March, 1905, to November, 1906, and from August, 1909, to March, 1910, the market, while, on the whole, showing an upward tendency, reflects a state of backing and filling in prices.

The first two instances culminated in the bull up-shoots of August to September, 1902, and of August to October, 1906. During these long periods of backing and filling, the secondary swings which mark the reactions are almost as prolonged in the price-range as the secondary swings which are a part of the great upward primary swing. Such a condition reflects the growth in the market of positive forces making for an opposite movement in prices.

There are points in connection with market movements which deserve a word of explanation. One of these is the tendency when a movement upwards or downwards has come to an end for the price, after reacting, to come back to the former high or low figure. Sometimes this happens more than once in succession. Such price movements are known as double tops or double bottoms and are often cited as affording evidence when they occur, of a cessation, for a time at least, of the movement. These double tops and double bottoms are easiest noted at the culmination of a long secondary price swing. In effect they represent the profit taking of those on the right side of the market. Their closing commitments account for the rally, after which prices deprived of further support or attack tend to sink back in a downward market, because there is no more buying, but if the level has really been reached offerings are taken freely at the lowest prices.

Another feature is what is called breaking through previous high or low prices. After a rally in the course of a

decline, if prices fall again and pass below the former low point, there is a good chance they will go still lower. Of course the reason is, that marginal holders, undisturbed before, will be affected by the new decline which is commencing to weaken margins unimpaired before. On the other hand, in an upward movement, a further advance through the preceding high point denotes an accession of fresh buying power which is not exhausted by the mere breaking through, but will persist further. These facts form the basis of much chart trading. It is hardly necessary to say that it is easy enough to imagine situations where these signs might occur without being followed by such consequences.

There are some practical consequences from the foregoing paragraphs which are worth indicating. One is that a few days' decline gives as much profit to a short seller as many days of rise to a bull. Again, in a declining or vacillating market, while the day of a good fall may, at times, be safely called, it is less easy to do this in a bull market as regards a smart bulge. For, while it may be obvious that an advance is due or is actually in progress, the day of an acute rise depends on the mental attitude of a host of more or less unknown participants and a number of pools whose intentions are seldom firmly revealed. On the other hand, the perception of the imminence, even if, not necessarily, of the exact day of, an acute fall means simply the knowledge that the market is honeycombed with weak accounts for the rise and that the buying impetus has ceased. The short sellers are

always present and may be relied on to seize the occasion.

It all comes to what has been already said, that in a rise the mass of the speculators pecuniarily interested are, and must be, active; in a fall they have only to be, and usually are compelled to be, passive, save when unwillingly forced to part with their commitments. A curious example of this state of things and of a forecast immediately verified occurred after the late President McKinley's death. It will be recollected that on the news of his passing away becoming public, the Exchange was ordered closed. On its reopening, a few days later, prices were at once bid up several points above the last closing. Large financial interests were holding up the market to avert a disturbance. After the opening, however, prices ceased to advance, and on a succeeding day, when the situation had become clarified, one of the best known financial dailies stated that the market was artificial and "a sale"—which prediction was, that same day, verified.

It appears that the statement may be hazarded that when the right time seems to be present, either for a bull purchase or for a short sale, the percentage of safety is larger in the case of the sale when that is indicated than in the case of the purchase should the latter seem timely—for, at least, the likelihood of some profit. The data on which to call a fall being more explicit in the long run, there is a greater chance, on the theory of probabilities, of the commitment going the wished-for way. Again, a bear does not have to pay interest on his commitments

and the loss of dividends on the stocks of which he is short is not of importance save for a very long pull—for a stock normally falls off the extent of the dividend when it sells ex-dividend. On the other hand, it is plain that a bear requires to watch the market closely as his increased percentage of success is based on his knowledge of current technical conditions and his capability, by its aid, of foretelling the sudden sharp falls.

There are several points in connection with the activity of the public in the market which need attention. Almost invariably, shares bought by a haphazard speculator go up at least a little after his purchase, for the simple reason that he does not purchase except when prices are going up. But either he buys so near the top that the market shortly after starts to sink, or else, what amounts to the same thing, he takes a very small profit by selling his stock, and then waits till it or some other share has still further advanced in price when he re-purchases once more. Other speculators of about the same calibre will at once overtrade on finding themselves with a profit. The question thus arises, What is the market effect of the profit taking of these numerous speculators and of their still much more heavy losses? As long as the market is going upward, it is evident that the stock passes from hand to hand at advancing prices, while the former owner takes over some other shares a little later. Thus, the fact of such public gains as there are, exerts no influence on the market calling for separate discussion. But in the case of the public losses an interesting question arises:

Why, if these shares have been generally bought by the public at somewhat lower prices, do not the losses at the top produce a fall corresponding to the rise above the rough figure at which the public entered? The answer is, that, sometimes, they do produce some such fall, but that, where the fall is not nearly so large as might be thus looked for, a large part of the stock is either held by investors or is obstinately held onto by public owners despite its fall. More generally, though, it may be said that the prices reached at the top of a great advance represent the opinion of those qualified to judge of the upper limit of the values of shares. The prices at which the "wise" sell to the public are regarded by them not as grossly unfair but, usually, as about the highest possible from an investment standpoint. Stocks, then, simply react, after which they fluctuate at relatively narrow figures compared to their range in the preceding rise. Such was the condition of things in the long period between May, 1901, and August, 1902.

## IX.

### **The Distribution of Profit and Loss in the Market**

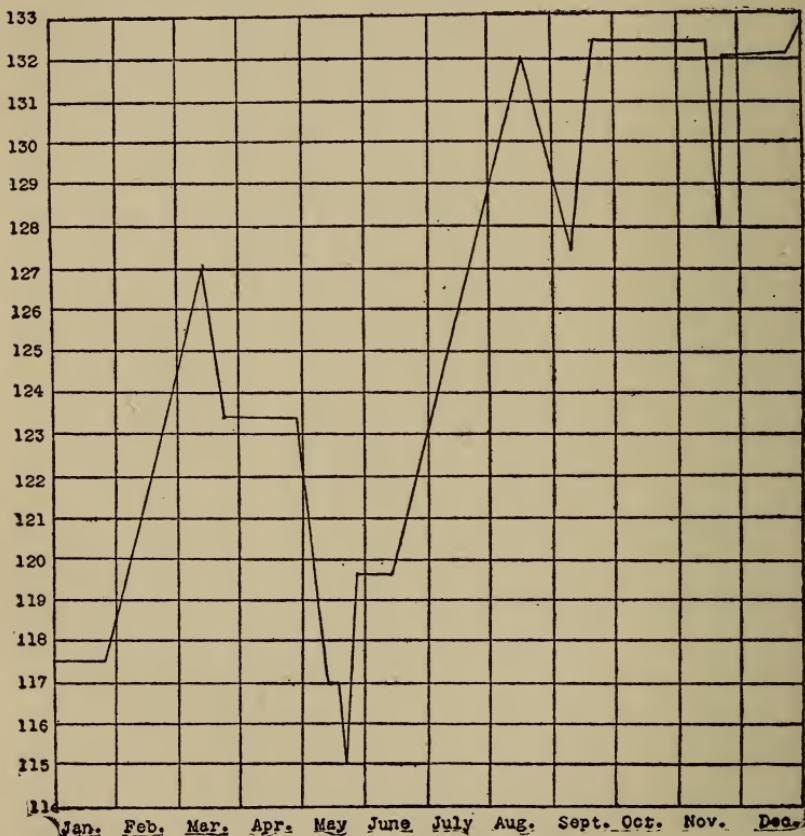
It is obvious that as long as stock prices move in one direction, those traders who go with the current may all gain and none of them lose. The shares pass from hand to hand at continuously advancing prices. But, if a stock be taken whose shares are selling say, at \$100 each, and the price be considered as advancing say, to \$150, and then as falling back to the former figure of \$100, the losses made in that stock during such an equal up-and-down movement will be exactly equal to the gains, although the profits of no one participant may be exactly equal to the gains of any other, and although in very few cases can one individual gain be balanced against another individual loss, as this would imply that two sales of the same amount of the same stock, first as a purchase on either side and then as sold, were made between two identical speculators. But, that the sum, during such a period, of the gains must be just equal to the sum of the losses will become clearer if the holders who have the stock at the start be viewed as having acquired their shares at the prices first considered, and if the final holders (whether the same or not, in any case, as the former) be viewed as having sold when the price returned to the figure first considered. The proposition of the equality of the gains

and losses then becomes almost self-evident; some of the profits and losses may, it is true, be on paper only, but they are instantly convertible, if wished or if necessitated, into cash. Thus, the popular conception that someone must always lose in stock speculation when another makes is true only in the case of an up-and-down movement. When a stock quotation has advanced above the price, in money or an equivalent, for which it was first issued by its corporation, the rise must have afforded to the owners as a whole greater gains than losses, although the gain may have been to fewer individuals than the losses. This is true with regard to any price arbitrarily selected as a starting point, if the view be restricted to the gains and losses during the period of up-and-down movement considered—that is, if gains and losses at the beginning of the period or any previously made, be ignored as irrelevant. It thus becomes evident that the great appreciation in price of Exchange stocks since 1900 has been the source of very much greater gains than losses.

To the distribution of loss and gain as caused by price movement, short selling superadds a feature of its own. This mode of trading is often likened to a contract for the future delivery of commodities—such as obtains in the grain markets. But this is not quite correct; stock sold short must be delivered at once, not at some time in the future. It must, therefore, be borrowed for delivery. If the "lender" of the stock be regarded as disposing of his shares to the short seller with the proviso of a double "call" on both side, it is easier to understand how this

method of trading affects the distribution of loss and gain in the market. The "lender" may be considered to have a "call" on the same amount of stock if the price goes up,

1905

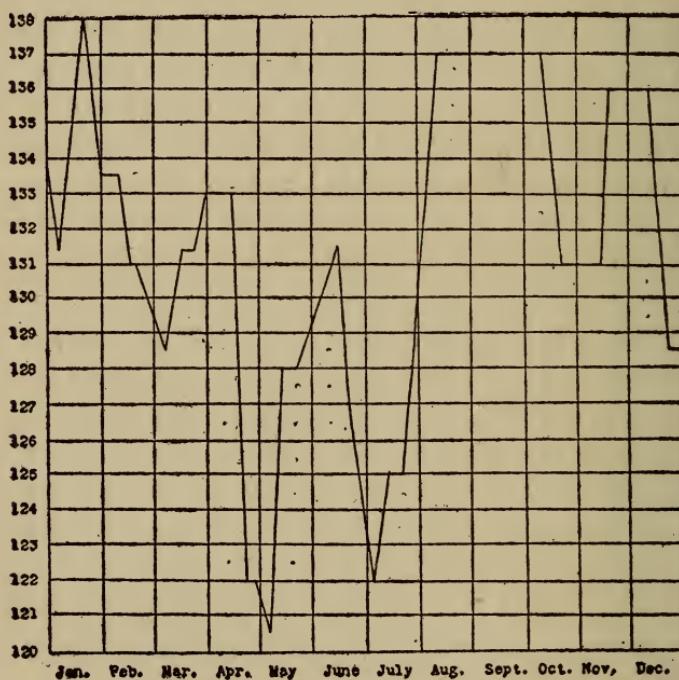


and the short seller to have a "call" on the amount of money he deposited if the price goes down. That this is

a legitimate way of regarding the transaction will be evident by reflecting that the short seller need not sell short at all in order to borrow stock. To be sure, the borrowing by itself would be futile, as the same shares in the end would have to be returned to the "lender." But the act is an economic whole which is actually possible by itself. The short seller makes what the "lender" loses through the depreciation of his shares when returned to him, or he loses what the "lender" makes by getting back shares salable for more than the amount of the money deposited with him by the short seller. Two different certificates (or their equivalent) for the same number of shares are almost always involved in short selling—the one at the beginning borrowed from the "lender" and handed to the buyer of the short stock; and the one at the end bought in by the short seller and by him handed over to the "lender." But these two opening and closing transactions in which the certificates change hands (or at least are cleared) may be regarded as simply two sales. The easiest way, then, to understand the distribution of profit and loss occasioned by short selling is to regard it as an arrangement by which the profit which the "lender" would have made (by selling his stock at the higher price) goes to the short seller, or the loss which the "lender" would have incurred by letting his stock go at the lower price becomes the short seller's loss. Short selling, then, is a sort of an arrangement by which a profit or a loss on paper which, without its occurrence, would accrue to another trader (the "lender") is handed over

in cash to someone else (the short seller). The situation produced by short selling is not really complicated nor hard to understand, but the facts leading up to it have some involved features which necessitate rather close attention to perceive their full bearings.

1906



Such being the mode in which profits and losses are distributed in the market, we have next to ask among whom is the actual distribution made and in what proportions. Here, as regards the first question, we may avail

ourselves of the analysis of 500 accounts made by Mr. Thomas Gibson and described in his "Pitfalls of Speculation." These accounts were all in United States Steel common and represent commitments made between July, 1901, and March, 1903. At the former date the stock price was 37 and the same price was touched at the later time. During the intervening period the stock price ranged between  $29\frac{3}{4}$  and  $46\frac{3}{4}$ . Mr. Gibson's words follow:

"Three hundred and forty-three accounts resulted in a net loss at their termination; 88 accounts resulted in a net profit; 52 accounts were even or showed inconsiderable differences. The result of 17 accounts is unknown, as the Steel stocks represented were taken up by the purchasers, in all cases at a considerable paper loss.

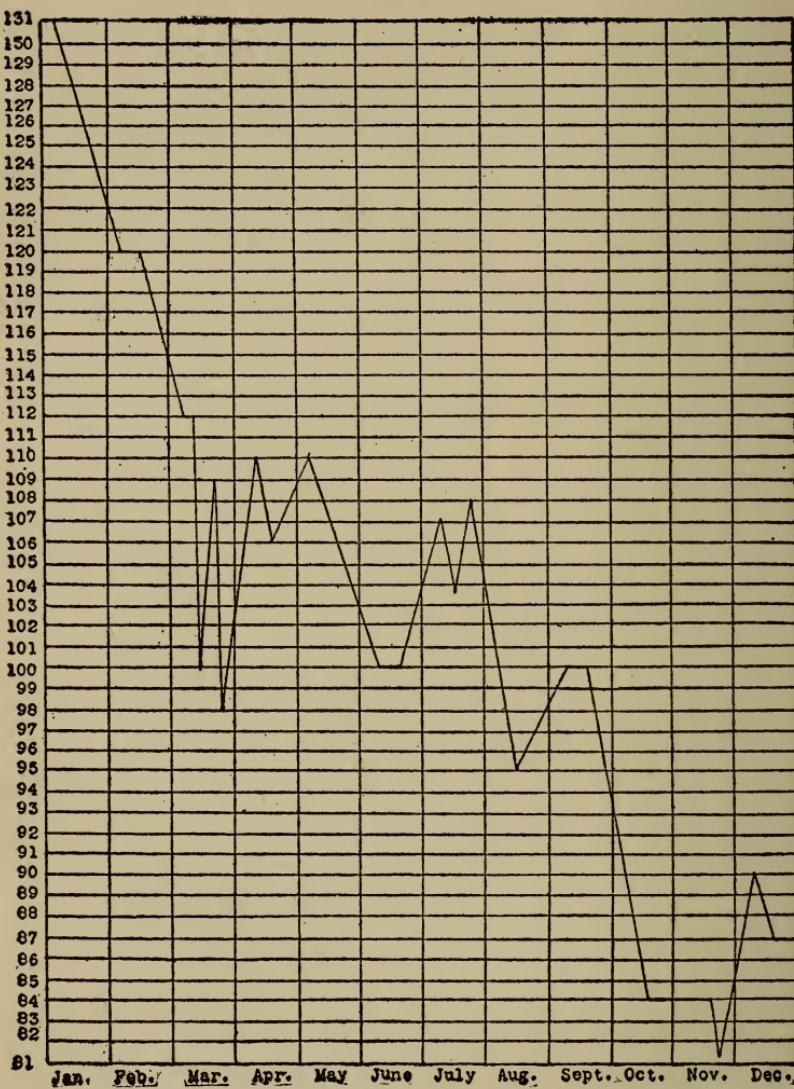
"The total deficit on all losing accounts was, \$1,245,000; the total gain on all profitable accounts, \$288,000; leaving a net deficit of \$957,000.

"The total number of shares handled was 1,112,000, of which 820,000 shares were originally purchases, and 292,000 originally short sales.

"The total brokerage charges, commissions, interest, etc., were \$275,000, which amount is included in the total loss.

"The comparative losses on short sales, share for share, were about 20% greater than the losses on purchases.

1909.

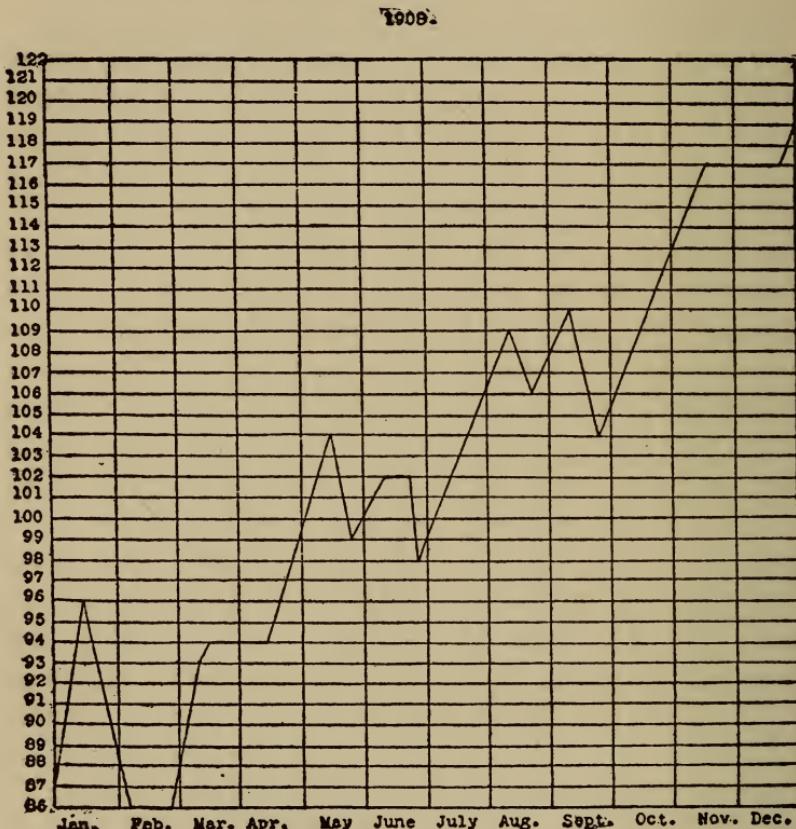


"The favorite method of operation was to purchase or sell on slight reactions from high or low prices.

"The average price of all purchases for long account was  $42\frac{5}{8}$  and the average price of all short sales was  $35\frac{3}{4}$ ."

That 343 accounts showed losses to 88 showing gains, and that the gains were but 20% of the net results is but a reiteration of the familiar fact of the "public's" losses. Who the relatively few winners in stock speculation are has been incidentally noticed, several times, in the preceding chapters. But the losers seem to have changed in character since the famous boom of 1901. There is little question that then almost everyone of speculative tendencies and the wherewithal to trade who could reach a brokerage house or even a "bucket shop" (of which there were then many) was interested in the rise that Spring. But, in recent years, trading has shown a tendency to be confined to the decidedly well-to-do members of the community. Certainly, the losers on the New York Stock Exchange are not the oft-quoted "widows and orphans," etc. Indeed it seems hardly worth while repeating that very few Exchange houses will take speculative accounts of less than 100 shares which means a minimum margin of \$1,000. No doubt, there is a considerable amount of trading on the Consolidated Exchange for the accounts of smaller speculators. But the transactions on this Exchange are on an average probably less than 1 in 10 compared with those on the "large board." To those who have had relations with brokerage firms in recent years there is

little doubt of what is the true answer to the question concerning the identity of the losers in stock exchange speculation. They are the successful business men of the



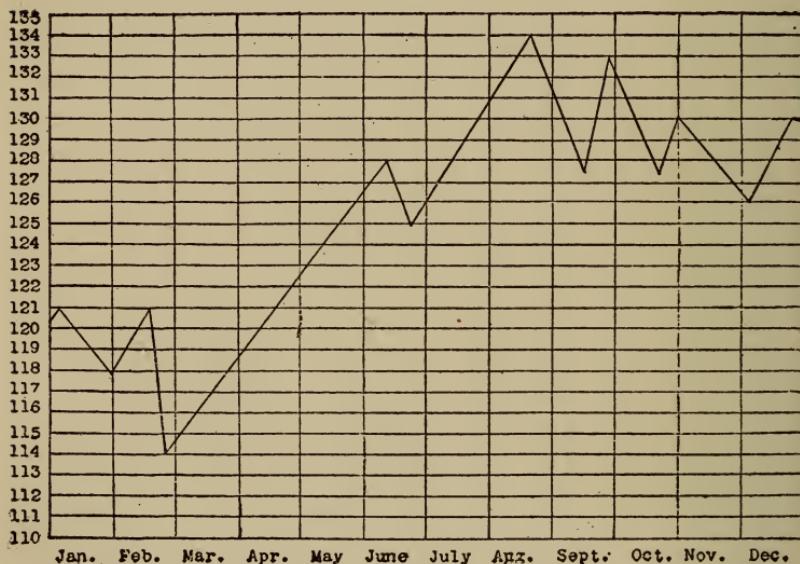
community and their losses are the surplus gains, in whole or in part, from their own occupation. It is the wealthy or well-to-do annuitant from a trust or from his own cap-

ital, the successful attorney, real estate man, publisher, merchant, doctor and other high-grade business or professional man, who comes regularly to Wall Street to dispose of his surplus money. Here, too, is a curious confirmation of the fact mentioned in the third chapter, when referring to the priority of stock prices to the business situation. At the end of a long decline in stock prices, those who have let go of stocks are not in a position to enter the market for some time, even when assisted by the banks. But when business picks up, large surplus balances ready for speculation again appear. Meanwhile stock prices have been advancing through the foresight of the "wise" assisted by the resources of the banks. It is the old story of the reapers being ready just when the harvest is ripe.

It might be interesting to enquire just what proportion speculators successful in the long run bear to those unsuccessful. No doubt the number would vary from year to year, but even for a rough approximation to the facts the data do not seem to be present. On Mr. Gibson's 500 accounts, the loss of \$682,000 (\$957,000 less the commissions, etc., of \$275,000) on transactions in 1,112,000 shares comes to but a trifle over 50 cents a share. This would give an average loss of about \$1,300 to each speculator. In this analysis the number of shares traded in by the 343 unsuccessful speculators is not given, so that an exacter result cannot be figured out. An investigation of a large firm's books would exhibit interesting facts in connection with this matter and would, also, show how

the average percentage of loss on each losing commitment compares with the average percentage of gain on each winning account. The ratio would at once furnish a good inference as regards the size of the average winning commitment compared with the average losing commitment. In the absence of such assistance we are restricted

1909.



to a consideration of what percentage of profits is obtained in the market by the winners.

In considering this question it should be noticed, first of all, that in all business the profit increases as the risk grows. This is true even of the mere investment bondholder. From Government bonds returning 3% or less

on the investment down to the lowest grade of preferred shares returning 7, 8 and 9% on the investment, there is a steady increase in the return as the risk grows. Looking at the matter a little closer, it will be found that, not only actual security but prestige, has much to do with the net return afforded by stock and bonds. Also, that a lesser speculative importance not infrequently keeps the prices of a security below the figures at which, in consideration of the financial strength and commercial prestige of the corporation, they might be expected to sell.

When, from corporations whose shares are listed on an exchange, we turn to trading companies the percentage of profits is found to have risen immensely. The causes back of this difference have already been discussed. Firms which have a capital of \$500 to \$5,000 make, as a rule, between 50% for the barely existing to 150% and 200% for the successful. Indeed, it is obvious that this percentage is indispensable to cover the living expenses of their owners. Retail druggists, grocers and other small merchants net yearly profits which probably fluctuate between 100% and 150%.

Now, of all businesses, that of stock speculation is most hazardous. It might therefore be expected that those successful in it would demand profits of large magnitude. Before attempting to decide what profits are, in fact, actually made by those on the right side of the market, year in and year out, the writer from experience and observation decided, simply as a conjecture, that 30 points profit a year was, on the average, about as much as could

be hoped for. How far this guess agrees with the results of the analysis will immediately appear.

The five diagrams given with this chapter show the average fluctuations of twenty railroad stocks listed on the New York Stock Exchange, in the years 1905 to 1909, inclusive. The data for these diagrams were obtained from the Massachusetts Publishing Company, but the diagrams are constructed on a slightly different principle from that generally made use of, as will be explained below.

In constructing the charts the fluctuations of the same stocks were used as those employed in the diagrams in Chapters IV and V. These stocks are: Atchison, Baltimore and Ohio, Brooklyn Rapid Transit, Canadian Pacific, Delaware and Hudson, Erie, Illinois Central, Louisville and Nashville, Metropolitan Street Railway, Missouri Pacific, New York Central, Norfolk and Western, Northern Pacific, Northwestern, Pennsylvania, Reading, Southern Pacific, Southern Railway, St. Paul, Union Pacific. The charts do not show all the movements but simply those, usually over three points—reasonably available for speculative purposes. Smaller variations have been noted in a few instances where their omission would give a misleading appearance to the market in any month.

In 1905, it is certain that a man conversant with the market would still be on the bull side which had been in the ascendant since the latter part of 1903. We may assume he would be on his watch for the top but well aware that this is a matter, in a long swing, not of weeks

but, often, of many months of backing and filling consumed in the secondary and still smaller swings. If we examine the diagram for this year it may be assumed that the successful speculator was long from February till March for a profit of  $9\frac{1}{2}$  points. On the principle that it is unwise to be short in a bull market he might refrain from selling short in March, when the insurance scandals and some other financial quarrels came to a head. Let us assume the speculator long again in May till August for 17 points profit. As a fall in stock prices in Autumn is almost regular on the Exchange, owing to the demand for funds for crop moving, he might go short in the last named month. Again the very bad money market in November might have led him to take the short side again. In December, in the face of the strength in stocks with very high money rates, he might have stayed out of the market. The two falls in August and November would give ten points more to his credit, or  $36\frac{1}{2}$  points in all for the year. But against this gain there are some technical factors to be taken into account. A speculator seldom strikes the exact top or bottom of a movement, he loses on interest charges when long and on accruing dividends when short. Moreover, errors at the opening and closing of accounts, necessitating small losses, are to be reckoned with. If then, we throw off three points from each commitment we shall be more conservative. In this way we arrive at  $26\frac{1}{2}$  points profit for the year. This is hardly too high in the case of the speculators who were actually successful that year, because the trader might not

unreasonably have done even better. He might have gone short at the beginning of the troubles in the Spring and have risked being long in the market in December in view of the assurances of big interests that it would not be suffered to fall. On the other hand, had he adopted the first of these courses, he might have been mistaken about the rise in May, for it is a difficult matter to change from the bull to the bear side or vice versa, and keep one's head clear.

In 1906, we may reasonably assume that our speculator saw what was apparent to almost all experienced observers, namely, that the market, in any event for the time being, was near its top. He would have been likely, consequently, to be short in the latter part of January. If he covered in May he would get  $17\frac{1}{2}$  points profit. If he stayed out of the market on the ensuing rise and again went short in June, another  $9\frac{1}{2}$  points profit would be to his credit. On the recovery in July he could hardly have failed to see that something very unusual was brewing, and if he had some sources of good information, as is usual with those successful, he would have seen good reason to be long of Union Pacific. Indeed the market action of the stock almost called aloud for participation. But confining his commitments to the average stock in which we are imagining him as dealing, we may allow him 15 points profit. In October and again in December he is short, making  $13\frac{1}{2}$  points. Aggregating the winnings on these five commitments, we have 55 points and throwing off 3 points as before on each commitment, we

reach 40 points profit for the year. Probably, this amount is still too high, as both 1906 and the preceding year, with their backing and filling, made difficult markets to deal in.

In 1907, an examination of the chart for that year will render it evident that a speculator might have fairly expected a profit of 50 to 60 points. In 1908, if we assume that the speculator was long, after February, the whole year, we may credit him fairly with 30 points. The two opening months presented a less obvious course of action. On the whole, however, 1908, like 1907, was a much less difficult year to trade in than either 1905 or 1906. Nearly all well informed observers anticipated a decline of magnitude in 1907 and a rise proportioned to the great 1907 fall which actually occurred, in 1908; 1909 was evidently a difficult trading year, due to the sharp February fall and the uncertainty of the market after August. Hardly more than from 15 to 25 points profit can be allowed, except to those actually in the forefront of market events.

It may be objected to the foregoing analysis that it is based on average movements, while, actually, trading is done in certain definite stocks. But, it must be remembered that a speculator usually deals in several stocks and that this method gives the easiest way of an approximation to his net results. Moreover, while the higher priced a stock, the more rapid is its fluctuation, the greater, also, is the risk, and the greater the margin required. The estimates given may be taken as fairly representative of the results of successful dealings in the years considered, in stocks selling at not so far from par. It may be added

that the fact that a trader in high priced securities (such as Great Northern preferred in 1905 and 1906), may make more points profit does not imply that he is making a larger cash gain. The necessity of holding in reserve a much larger margin may reduce his profits.

It seems worth while to throw into percentage form the foregoing results of successful trading. For speculating in a stock selling near par, a trader will probably want an available margin of, say, at least 25 points, of which 10 may be in the hands of his broker. If a speculator is dealing in 100 share lots, his capital would thus be \$2,500 as a minimum; if in 500 share lots, \$12,500, and if in 1,000 share lots \$25,000. Taking the first case, that of the trader in 100 share lots, let us see what percentage profit is indicated in each of these five years. In 1905 he would have made about 25 points on his capital, or 100% profits; in 1906, possibly 40 points, or about 160%; in 1907, 55 points, or 220%; in 1908, 30 points, or 120%; while, finally, in 1909, if we allow him 20 points, his profits would be \$2,000, or 80%. If a more conservative total capital of the equivalent, say, of 30 to 40 points, be kept back of the trades, the percentage of profit would be correspondingly reduced. No definite average can be given, even in the roughest fashion. Some wealthy traders take very large risks, while others are always in a position to buy outright every share they deal in.

## X.

### **The Psychology of Speculation**

What temperament a successful speculator should have, what knowledge and what resources, are matters which have been much discussed. As a matter of fact, traders with a large knowledge of finance and the stock market, both win and lose. So, too, as regards temperament: the nervous man and the phlegmatic; the hopeful and the pessimistic; all may make and lose. The questions of knowledge and temperament do not quite get to the core of the matter. Here, the subject arises only as illustrating how prices are actually made by those whose action is dominant in the market.

Ignorance, over-speculation and carelessness have been assigned as the chief causes of speculative loss. But the whole gist of the matter seems to lie in the fact that the attitude, as a rule, of those on the losing side of the market, is hopelessly wrong. It is doubtful if there is a customers' room manager who, at times at least, has not been literally astounded at the manner in which successful business men, often of the closest-grained sort, throw away their money at the suggestion of irresponsible tips and chatter. The usual commission house customer, popping in and out of the market at every rumor, reminds one of nothing so much, as an English writer puts it, as of those flies about a piece of beef disturbed by the butcher

boy's approach. The ignorance, the over-speculation and the carelessness of such customers are often the plainest sort of facts, but they are not the bottom of the trouble. The futile and fatuous commitments of men who in their own business readily amass thousands are not to be dismissed with so easy an explanation. At bottom, the average customer of a commission house does not regard speculation as a possible business in any sense of the word. He regards it as a gamble—a word, by the way, which he is very prone to use, and which more than anything else as brief, explains the character of his commitments. That stock speculation is a matter wholly useless to study, is another oft-heard remark of the same tenor.

But the fact that so very few traders take the trouble to attempt to deal in the market as with a business proposition, leads to the likelihood that, to many men, this is literally impossible. The simple operation of short selling is explainable with extreme difficulty to most commission house customers, often those of years' standing—a proof, not of mental obtuseness but that the most elementary stock market operations belong to a class of dealings which their commercial training has left wholly alien to them.

Two matters thus arise for discussion in connection with successful speculation. What experience does it normally imply? and, What is the attitude actually taken towards their commitments by those right in the market?

In all trades and studies, experience supplies the ability to discern the practical bearings of one's knowledge

and to act at once on this discernment. Without experience there is wanting the facility to carry easily into practice the theory illustrating the matter in hand. The French have a maxim, "One can't think of everything," and it is just because he cannot think of every detail and of how to meet it on the instant when it should be thought of and met, that the speculator without experience is necessarily left in the lurch, no matter how gifted naturally he may be. Observation of what should be seen and execution of what should be done, come, through many repetitions, to be almost a reflex physical act to the experienced trader. No matter how phlegmatic and thoughtful an operator he be, one lacking experience will almost certainly, in a difficult position, lose his head to the extent, at least, that he will not be able to apprehend and to carry out at the time the line of action which his own afterthought may readily show him to be the right one. It is true that, without the innate capacity of being trained to this rapid decision and action, no man is likely to succeed in speculation. But the training is just as necessary as the capacity, and without the former successes can be regarded only as mere windfalls of luck, sure to be reversed in the end when difficult days come.

The value of experience in the market has been neglected, because it is evident that the only way to get this sort of experience is to pay for it in the market itself; and those who, with considerable capital, start to acquire it this way are likely to desist, owing to the im-

possibility of paying further. Small commitments during the time of one's early trading might be suggested, but, however acquired, the experience must be attained. It only remains to be added that it is not to be acquired on paper. No one can learn to speculate simply by watching the market, because no one acts the same when he has put up a real, and when only an imaginary stake.

If, now, we turn to the mental attitude of the speculator on the right side of the market, in each and every case not assisted by sheer luck, it will be found to be, what that of those on the wrong side is but nominally—a true "speculation." Really to speculate for a rise means to buy now because in the future prices are expected to be higher; and prices in the future are expected to be thus, because conditions then, not now, will warrant higher prices. But, it is merely an expansion of what has gone before, to insist on the point that the average speculator buys because conditions now are good. "Business looks great; stocks can't help going up," is one of the most frequently heard remarks of a general sort in the average customers' room. But, on the contrary, the truth is, that, if business now looks great, the prices have already advanced to meet this "greatness"—have "discounted it." Stocks do not go up only because business is now "great," though they may stand still on that account, and may often, as shown previously, go down while this state persists in its entirety. If an advance in stocks is "backed" by the experienced, it is not at all on the bare fact that, say, railroad earnings are now very large, but because it is believed that they will be still

larger in the future. The knowledge which the successful trader seeks is that of the condition of things (as far as attainable) months ahead. That of things at present simply give him a point of comparison from which to shape his view.

If we turn to the right mental attitude at the opening of an account, it might be said that this means a vivid and exact imaging of what is expected to happen and of what is expected not to happen. A speculator believes Atchison will advance in price. Why? It may be because of special facts connected with the Atchison finances; or, it may be because of a bettering business situation; or, because of a good technical market situation; or, because two or more of these facts may concur. Again, a complete comprehension of the situation involves a clear idea of when the shares are expected to change in price. If a speculator thinks Atchison will advance in price shortly, without information as to just how soon, his grasp of the situation is very different from what it would be did he think the price would advance at once; and, if, in either case, it did not advance at once. In the former case, he has made no error in judgment; but, in the latter, either his forecast was wrong throughout, or events which he failed to appraise rightly, operated against the causes on which he had relied for the fulfilment of his views.

A definite image of the unfavorable contingencies believed to be excluded from the situation is likely to be formed by those marketwise. For, if such contingencies,

contrary to one's opinion, eventuate, it is a sure sign of erroneous thinking or of a lack of data on which to go. In the latter case, the trader habitually on the right side of the market, if he opens a commitment, will do so with the clear consciousness that his act is here a gamble. To see clearly the odds against one is a capacity hardly to be found lacking among the successful.

It is legitimate for a speculator to test the market if he clearly realizes that he is doing so. He may feel sure of a rise but uncertain of the time of its beginning and may not want to run the risk of missing it. A forecast, in a quiet market, that a rise is due in a month or two may be inadequate, even if true. Something may turn up in a month to abort the situation. But the idea that a rise is due, either in a month or two, or else now, calls for the further consideration as to what circumstances may occur which will show the speculator he was mistaken. Futile efforts to boom the market, liquidation, signs of trouble ahead, may be some of these circumstances; and the trader who buys on the situation as it stands, with no clear idea of just when it will change as he forecasts that it will change, may carry with him the intent to alter the direction of his commitment should the situation change before the prices do. He may get out if things become merely doubtful, go short if things become plainly black.

The mere number of successful commitments is no test of speculative ability. A loss on a poor commitment may be as large as the gain on five or ten good commitments

(as a matter of fact, something of this sort very often happens). The amount of money made is, of course, the decisive test of ability in the long run, but not necessarily in a short run. The gains may be due, partially or wholly, to luck. The test soonest applicable is the percentage of the number of times the speculator succeeds because what he forecast would happen, does happen; and what he forecast would not happen, does not happen.

The foregoing paragraph may throw some light on a statement attributed to Mr. James R. Keene, that he has been successful but four times out of seven. If Mr. Keene ever made this remark, it is to be hoped his conversation threw some light on what he meant by it; for, as it stands, it is not perspicuous. If it means that out of the wealth adventured by him his gains have been to his losses as four to three, it may or may not be true, but, in either case, it is here irrelevant. But, if it means that out of an average of seven commitments, he has won four, there are successful speculators, especially those who often take small losses, who win much less frequently, and unsuccessful ones who have won much more frequently. The number of commitments won or lost is, by itself, no more necessarily a test of success than it is of ability.

When do successful traders close accounts? When do they take profits? A good deal depends on whether the price-change is due to general or to special causes. In the case of a stock merely moving upwards in price,

along with the general stream of quotations, the question is, to determine when the stream stops flowing in an upward direction. In the case of a stock in which there is also manipulative control, it may be possible to obtain some idea of the price to which the pool intends to put the shares; if not, it may be stated generally, that where a stock sells clearly above its investment worth, it is time to think of closing the commitment. In regard to this, as to the other details of the market, it may be added that the trader fitted for the business does not, ordinarily, reflect on this or that rule or principle. Taking a survey of the whole matter, he sees at once the bearings of each fact, and trained, as he is, by previous experience and thought, perceives and takes the proper course of action.



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